

COUNTY OF DUMFRIES.

FORTY-SIXTH

ANNUAL REPORT

UPON THE

*Health and Sanitary Condition of
the County.*

1936

AND

**Report on School Medical Inspection
and Treatment**


For Year ending 31st July, 1937,

BY

JOHN RITCHIE, M.B., Ch. B., M.R.C.P. Ed., D.P.H.,
County Medical Officer.

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Instit. (2) Thornhill District.

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ROBERT BELL (4) Annan District.

HARRY W. BRYSON (5) Gretna District.

WM. MOLLISON, Cert. of Roy. San.

Assoc. Scot. (6) Lockerbie District.

JOHN SANSON, Cert. of Roy. San. Assoc. (7) Moffat District.

A. A. OLIVER, Cert. of Roy. San. Assoc. (8) Langholm District.

To

The Department of Health for Scotland.

The County Council of Dumfries.

Ladies and Gentlemen,

I have the honour of submitting my Report for 1936, being the Forty-sixth Annual Report on the Health and Sanitary Conditions of the County of Dumfries.

I also submit the Report on School Medical and Dental Inspection and Treatment for the year ending 31st July, 1937.

I am, Ladies and Gentlemen,

Your obedient Servant,

JOHN RITCHIE,

Medical Officer of Health.

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REPORT

VITAL STATISTICS.

Population.

The Registrar-General's estimate of the population in the County Landward and Small Burghs during 1936 is as follows :—

(a) County Landward	44,505
(b) Burghs—Annan	3,934
Sanquhar	1,880
Lochmaben	1,061
Lockerbie	2,574
Moffat	1,979
Langholm	2,439
Total	58,372

This is 159 less than the estimate for 1935.

Births.

The births in the County Landward and in the Small Burghs during 1936 were :—

	Births corrected for transfers.	M	F.	Birth Rate.	Per cent. of illegitimate Births.
County Landward	756	387	369	16.5	12.6
Burghs—					
Annan	74	43	31		
Sanquhar	34	19	15		
Lochmaben	16	6	10		
Lockerbie	35	19	16		
Moffat	22	11	11		
Langholm	28	14	14		
Total	965	499	466		

The total is an increase of 20 on the figure for 1935, male births having increased by 18, and female births by 2. The birth-rate—16·5—is 0·04 per 1000 of the population higher.

Illegitimate births amounted to 12·6 per cent. of the total—almost double the rate for all Scotland. Reference to the continued high level of this rate in the County has been made on numerous occasions. It is not possible to discover any social or economic causes sufficient to explain its continued excess over that for the country as a whole. Although the Public Health Authority may have no direct interest in discovering the reason for an abnormal number of illegitimate births, it is closely concerned with their effect on infant mortality and on the number of applications for public assistance. The following figures are of interest :—

Illegitimate Births—Percentage of Total Births.

Year.	Dumfriesshire.	All Scotland.
1931	12·8	7·2
1932	12·0	7·1
1933	11·7	6·9
1934	11·2	6·9
1935	12·2	6·6
1936	12·6	6·4

The figures for many years back may be examined without any lessening of the disparity between the two rates being found.

Deaths.

The number of deaths in the County and Small Burghs, corrected for transfers “in” and “out,” was 785 (males 354, females 431), which is 25 less than the figure for the previous year. The death-rate, corrected and adjusted for age and sex distribution, was 11·8 per 1000 living, which is 0·4 per 1000 below that for 1935.

The numbers, causes, and age periods of deaths are shown in the following table, arranged under the headings of the Short List of the Intermediate International List of Causes of Death as adapted for use in Scotland:—

	All ages	-1	1-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-
Scarlet Fever	3	...	1	1	1	...	...	...	...	...	...	...	...
Whooping-Cough	2	...	2	...	...	...	...	...	...	...	...	...	...
Diphtheria	3	1	1	1	...	...	...	...	...	...	...	...	...
Influenza	4	...	...	...	...	...	...	1	1	1	1	...	...
Other epidemic diseases	3	...	...	...	...	...	...	...	1	2	...	...	...
Tuberculosis of respiratory system	25	...	...	...	...	5	4	7	3	6	...	...	...
Other tuberculous disease	9	1	2	...	1	2	...	1	1	...	1	...	...
Other infectious and parasitic disease	6	...	...	...	1	...	3	...	1	1	...	...	...
Cancer (malignant disease)	89	...	...	...	...	...	1	4	13	23	23	22	3
Diabetes mellitus	8	...	...	...	...	...	...	1	1	2	4	...	...
Other general diseases	16	1	...	1	1	1	1	2	...	2	6	1	...
Cerebral hæmorrhage, etc.	90	...	...	...	...	...	...	2	4	13	28	36	7
Other diseases of nervous system	25	9	...	1	...	...	1	2	4	5	1	2	...
Heart disease	227	...	...	...	1	3	1	4	14	39	83	70	12
Other circulatory diseases	14	...	...	...	...	...	...	...	...	1	5	7	1
Bronchitis	33	3	...	...	...	1	...	...	1	5	8	13	2
Pneumonia (all forms)	39	10	5	...	...	3	2	1	3	8	2	5	...
Other respiratory diseases	9	1	...	...	...	...	...	...	...	4	...	4	...
Gastric and duodenal ulcer	3	...	...	...	...	1	...	...	...	1	1	...	...
Diarrhœa, etc. (all ages)	8	6	1	...	...	...	...	1	...	...	...	...	...
Appendicitis	2	...	1	1	...	...	...	...	...	...	...	...	...
Diseases of liver (ex. cirrhosis)	8	...	...	...	...	...	...	1	...	...	3	3	1
Other digestive diseases	10	1	...	...	...	1	1	...	...	1	3	3	...
Acute and chronic nephritis	28	...	1	...	1	...	...	1	5	4	10	6	...
Other genito-urinary diseases	6	...	...	...	...	...	...	...	1	...	1	2	2
Puerperal sepsis	2	...	...	...	...	...	2	...	...	...	...	...	...
Other puerperal causes	4	...	...	...	...	1	2	1	...	...	...	...	...
Diseases of skin and locomotor system	6	...	1	...	...	...	...	...	...	1	2	2	...
Cong. debility, pr. birth, malformations	39	38	...	1	...	...	...	...	...	...	3	16	7
Old age	26	...	...	...	...	...	...	...	...	...	3	...	...
Suicide	3	...	...	...	...	1	...	1	...	1	...	...	...
Other violence	24	2	1	...	...	2	1	3	2	6	3	4	...
Causes ill-defined or unknown	11	...	...	...	...	...	...	...	1	2	3	4	1
All Causes	785	73	16	6	6	21	19	33	56	128	191	200	36

Of the 785 deaths, 73 were of infants aged less than one year. The infantile mortality is 76 per 1000 births, against 72 in 1935. The rate for Scotland during the year was 82·3.

Deaths of mothers from puerperal causes numbered 6 (Sepsis 2, other puerperal causes 4). This is equivalent to a rate of 6·2 per 1000 births, as against 7·4 in 1935, and 8 in 1934.

The death-rate from all forms of Tuberculosis was 0·58 per 1000 of the estimated population. This is 0·05 above that for the previous year, but still much below any rate recorded prior to 1935. The corresponding rate for Scotland was 0·74 per 1000.

A. GENERAL.

No matters of special general interest arose during the year. Apart from routine administrative work, the Committee's time was largely devoted to questions arising in connection with the Lower Nithsdale and Mid-Annandale and the Lower Annandale Special Water Supply Districts, and with the housing developments which will follow those.

B. GENERAL ENQUIRIES.

No general enquiries other than those found necessary in the course of routine work could be undertaken during the year.

C. WATER SUPPLIES.

Particulars of the formation of the Lower Nithsdale and Mid-Annandale District and the extension of the Lower Annandale District were given in last year's report.

A number of representations were received from proprietors of lands outside the boundaries of the new and enlarged districts, asking the Council to provide them with adequate water supplies. The Public Health Committee also considered carefully the inadequacy of the existing supplies in the Moniaive and Beattock Special Water Supply Districts. In consequence it was decided

that the necessary statutory proceedings should be instituted to extend the boundaries of the Lower Annandale Special Water Supply District so as to include a portion of the parish of Half-Morton, and those of the Lower Nithsdale and Mid-Annandale Special Water Supply District to include parts of Hoddum, St. Mungo, Applegarth, Wamphray, Moffat, Kirkpatrick-Juxta, Johnstone, Penpont, Tynron, Keir, and Glencairn.

Plans and estimates were accordingly prepared. When those were considered, the Committee decided that the expenditure entailed could not be justified unless a Government grant were available to ease the financial burden which would be laid on the ratepayers. As the funds made available by the Rural Water Supplies Act, 1934, were by this time exhausted, no grant could be obtained, and the Committee reluctantly postponed further action meantime. It is to be hoped that the increasing recognition of the importance of water supply as the foundation of all environmental improvement will induce Parliament to make further provision for financial aid to districts whose own resources are inadequate to meet their requirements.

So far as the existing Special Water Supply Districts are concerned, nothing of special moment occurred during the year. There was some shortage in the higher areas supplied by the Lower Annandale system at the beginning of the year. This appears to have been mainly due to leaks following the frost. The whole of this system received a great deal of attention during the year, numerous leaks were detected and repaired, and other defects remedied. In consequence the supply within this area is now in better order than it has been for years.

The Ecclefechan and Eaglesfield supplies also suffered from shortage due to leaks after the frost.

In the Kirkcannel District there were occasional complaints of discolouration of the " Old " supply following rain.

Both Moniaive and Penpont ran short during June, and in both places water was cut off overnight for a period in order to conserve the supply.

Bankshill experienced some shortage during May and again in June. This is a very small District, with limited storage, and the shortage seems to have been caused by excessive consumpt at certain times. An additional spring was taken into use, and the supply thus augmented has since been sufficient.

Nothing requiring special comment occurred in the other water districts during the year.

D. & E. DISPOSAL OF SEWAGE AND POLLUTION OF RIVERS.

(1) NITHSDALE.—No instance of serious pollution of the upper reaches of the Nith by coal washings was reported during the year.

The sewage works at Kirkconnel, Sanquhar, and Thornhill gave no cause for complaint.

The works at Moniaive continue to give a satisfactory effluent. It is unfortunate that it has been impossible so far to carry out the remedial works on this system which have been authorised.

(2) ANNANDALE.—As in former years Lockerbie Burgh sewage works have demanded a good deal of attention. It cannot be claimed that they produce a satisfactory effluent. It can only be said that were it not for the constant attention given by the Burgh Surveyor and his staff matters would be much worse.

The conditions at Springfield and at Gretna Green remain as described in my last report.

(3) ESKDALE.—Nothing requiring comment occurred during the year.

The need for improved facilities for sewage disposal in connection with re-housing is referred to in Section F.

F. HOUSING.

The progress which is being made in the provision of adequate water supply throughout the two large Special Water Supply Districts of the County encourages the hope that it may soon be no longer necessary to begin this section with a reference to the restriction of re-housing activities consequent on the insufficiency of existing water supplies. The problem of drainage facilities still presents a difficulty in certain places. As I have indicated in previous reports, the provision of drainage is simple enough in the case of individual houses, or small groups of houses in the country; it is less easy of solution when it is proposed to build any considerable number of houses on a site where drainage is non-existent and its provision expensive.

Watchhill, near Annan, is a case in point. As stated in my Report for 1935, representations were made towards the end of that year that Watchhill, Howgill, and Lochfield should be dealt with as a Clearance Area, under Part I. of the Housing (Scotland) Act, 1930. The Sub-committee visited the houses early in 1936, and decided that the representations were fully warranted, but that the formation of a Special Drainage District to serve the new houses required to replace those demolished would cost more than the proposed district could bear. If the new houses were erected in the vicinity of Watchhill a sewer of considerable length to the Solway would be required, but this arrangement would make it possible to include in the district a number of existing good class houses on the Kirkpatrick-Fleming road, for which drainage facilities are required and are at present practically non-existent. If, on the other hand, the new houses were built on some site nearer the Solway the length of the sewer would be less and its cost correspondingly reduced, but it could not be used to drain the other houses referred to. Representations regarding the difficulty were made to the Department of Health, and it is hoped that a satisfactory solution may ultimately be found.

Meantime, the houses at Watchhill remain *in statu quo*—a state of matters which neither the Department, the local authority, nor the tenants can regard with satisfaction.

The situation might have been eased considerably if a proposal put forward by some private individuals to erect a number of houses on a site between Watchhill and the Solway had come to fruition. This would have entailed provision of drainage facilities, and also an increase in the valuation of the district sufficient to make that provision possible. Unfortunately the scheme, impressive in its inception, had dwindled before the end of the year to such small dimensions that it had to be disregarded, for the time at least, as a possible factor in the sanitary development of the area.

Negotiations with proprietors of houses included in the Ecclefechan Clearance Area were continued during the year, in hopes that an agreement might be reached without the necessity of a public enquiry by the Department of Health. This proved impossible, and eventually the Public Health Committee requested the Department to proceed with the usual statutory procedure for determining appeals by owners of properties included in the area. The enquiry was held at the County Buildings on 9th October, and the area thereafter visited by the Commissioner and interested parties. The decision of the Court had not been received by the end of the year under review.

The question of Rowanburn was again under consideration. This village consists of 63 houses, all below modern sanitary standards and, on account of their type and arrangement, not capable of modernisation. The water supply, though sufficient for existing demands, would be inadequate for those of new houses with proper sanitary equipment.

There is now no industry in the neighbourhood entailing the existence of a village like Rowanburn, and no likelihood of any development which would justify a rehousing scheme of any size in the area. The majority of the houses are owner-occupied.

There is no doubt that the village would be a proper subject for a Clearance Scheme, and will eventually have to be dealt with under Part I. of the Housing (Scotland) Act, 1930. Action was deferred meantime pending further consideration of re-housing arrangements in Langholm District.

The most important housing activity during the year has been the initiation of the housing survey under the Housing (Scotland) Act, 1935. It was determined that this should comprise, not only the details required by the terms of that Act, but also a full sanitary report on each house. Two temporary sanitary inspectors were appointed for this duty, and extra clerical assistance provided. The Committee decided that the first areas to be surveyed should be, generally speaking, the special water and drainage districts where erection of new houses is practicable, or will be in a short time.

The Kirkcannel Special District was dealt with first, as it was recognised that overcrowding was a more serious problem there than in any other part of the County. The number of houses inspected was 639, inhabited by 724 families. The number of *families* living under overcrowded conditions was 326. The total number of *houses* overcrowded was 298. It proved extremely difficult to draw up a report which would give anything like a clear idea of the housing conditions in Kirkcannel, as the variations in tenancy and sub-tenancy are so numerous. In a sub-let house, for example, the principal tenant, the sub-tenant, or both may be living under overcrowded conditions. The house, as a whole, is not necessarily overcrowded, although one of the tenant's families may be. In the course of the survey it was found that 38 principal tenants' and 50 sub-tenants' families were overcrowded, but in only 59 cases were the *combined* families sufficient to overcrowd the house *as a whole*. In some cases, removal of the sub-tenant would abate overcrowding, in others the principal tenant's family alone would overcrowd the house. In 70 families lodgers were kept.

33 of those families were overerowedd in 13 cases on account of the presence of the lodger, in the others irrespective of it. It will be understood that so complex a state of affairs cannot be reduced to a simple tabular statement which can be understood at a glance!

The houses unfit for habitation which were regarded as incapable of being made fit at a reasonable cost numbered 22.

The final conclusion was that a total of 193 houses was necessary to re-house tenants of overcrowded or unfit houses. (This is on the assumption that "decanting" is adopted to its full possible extent.) The estimated surplus of existing two-roomed houses is 112.

The other districts surveyed during the year presented a much simpler problem. In the Moniaive Special Water and Drainage District 186 houses were inspected. The number of families living under overcrowded conditions was 10. The number of overcrowded houses was the same. 45 houses, including 5 which are overcrowded, were regarded as unfit for habitation and incapable of being made fit at a reasonable cost. On the assumption that "decanting" would be adopted to its full extent, it was estimated that 44 new houses were needed to re-house the tenants of unfit and overcrowded houses. No surplus houses would remain.

In Penpont Special District 132 houses were inspected. 13 families were found living under overcrowded conditions. The number of overcrowded houses was the same. 16 houses, including 5 of those overcrowded, were regarded as unfit for habitation and incapable of being made fit at a reasonable cost. There are, however, a fair number of what may be called border-line houses in Penpont—houses, that is, which are structurally in sound condition and in reasonable repair, but which may prove costly subjects for modernisation. Some of these may eventually have to be added to the list of those to be replaced by new houses. Leaving them out of consideration meantime, 14 new houses are required. It must be

pointed out, however, that the drainage system at Penpont is of obsolete pattern, and structurally in bad condition. Its replacement by modern sewers and sewage works seems an essential preliminary to re-housing.

Although not a special district, the village of Carron-bridge was surveyed. 60 houses were inspected, 10 houses and 10 families being found overerowed. 8 houses were scheduled as unfit, and, allowing for decanting, 6 new houses are required.

As a considerable number of houses in the Lower Nithsdale and Mid-Annandale Special Water Supply District are owned by the London, Midland & Scottish Railway Company, a special survey was made of those. Of 103 houses inspected, 32 were found to be overcrowded, although, generally speaking, the degree of overcrowding was not excessive. It was estimated that, with six possible exceptions, all the houses could be brought up to a proper sanitary standard at a reasonable cost.

A report was prepared dealing with reconstruction and repairs necessary to bring houses owned by the County Council up to modern standards.

The Chairman of the Housing Sub-committee, along with the County Clerk and County Medical Officer, appeared before the Scottish Housing Advisory Committee to give evidence regarding rural housing problems.

The following is a summary of the work during the year :—

Plans submitted—

New houses to be erected by the County Council	...	60
New houses to be erected by private enterprise	....	29
Alterations and improvements on existing houses, including those under the Housing (Rural Workers) Acts	.....	198
Other plans	.....	42

Houses completed—

Erected by the County Council	.....	32
Erected by private enterprise	.....	30

Two thousand and eighty-four houses were inspected during the year, including those visited in the course of the surveys referred to above. Of those, 428 were considered unfit for human habitation. 98 representations were made recommending Demolition Orders, and 108 houses were rendered fit without notices under Section 14 (1) of the Housing (Scotland) Act, 1930.

Finally, I should like to emphasise that the existing Housing Bye-laws for the County are obsolete, and the adoption of an up-to-date code is eminently desirable.

G. HOUSING (RURAL WORKERS) ACTS.

Applications in respect of 128 houses were received, this being an increase of 6 houses on the previous year. The applications in respect of 85 of those were approved during the year.

In order to induce more proprietors to take advantage of the facilities offered by the Act while there is yet time, a memorandum was circulated on the instruction of the Committee to all owners of houses in the County, drawing attention to (1) the financial assistance available under the Housing (Rural Workers) Acts, (2) the statutory powers of the Council to enforce housing improvements, and (3) the policy of the Council as regards the application of the relevant legislation.

As the progress of surveys under the 1935 Act made it evident that overcrowding is largely due to the unduly high proportion of two-roomed houses in the County, the Committee decided that, unless in exceptional circumstances, they would not give grants for the renovation of houses which, when completed, would have less than three rooms. They also determined that, to be eligible for grant, each reconstructed house must have a bath-room with a fixed bath, or sufficient space for the introduction of a bath when required.

In several cases the desirability of powers to give assistance for the erection of new houses instead of the

renovation of old ones was again obvious. Reference to this was made in my Report for 1935.

H. TOWN PLANNING.

Although no formal discussions on this matter were held during the year, it is becoming increasingly evident that some system of planning will shortly be required in the more populous parts of the County. This is specially the case where housing developments are likely to be sufficiently extensive to demand drainage systems. Already the prospect of an adequate water supply in the Lower Nithsdale and Mid-Annandale District has brought a number of enquiries as to the possibility of developing building sites in various parts of the County, mainly in Dumfries District. As the need for houses in rural areas depends primarily on the amount of employment available, the practicability of providing them on facilities for water supply and drainage, and their convenient use on the proximity of roads, railways, shopping centres, schools, etc., it is evident that a good many points may have to be considered before deciding the general lines along which housing should proceed, and it seems certain that if a planning scheme were adopted it would simplify the work of the various committees responsible for social services.

I. INFECTIOUS DISEASES.

Three hundred and fifty-two notifications were received from the County Landward and Small Burghs. This is a decrease of 118 on the figure for last year. The reduction is mainly due to the continued fall in the incidence of scarlatina, of which there were 134 cases against 202 in 1935, while the notifications of diphtheria also fell from 80 to 55.

As I pointed out in my Annual Report for 1935, the number of cases of tuberculosis notified in that year—94—was much the smallest ever received. It is gratifying to be able to report that the figures for 1936 are much better.

Only 68 cases were reported during the year. This is a little more than one-half of the average for the previous ten years, and almost exactly one third of figure recorded twenty years ago, in 1916. It would, of course, be foolish to conclude that the low figures for those two years represent a dramatic advance towards solving the problem of tuberculosis, but it is at least satisfactory that the drop noted in 1935 has not been followed by a compensatory rise in 1936.

The total cases notified, the districts in which they occurred, and the age-periods affected are shewn in the following tables :—

	Dumfries	Thornhill	Sanguhar	Annun.	Greta.	Lockerbie	Moffat	Langholm	Total
Enteric Fever ... ..	...	...	...	...	...	1	...	...	1
Scarlatina	28	34	4	19	12	31	1	5	134
Diphtheria	10	8	22	2	10	3	...	...	55
Erysipelas	7	1	2	2	3	1	2	...	18
Puerperal Fever ... ..	...	1	...	...	...	...	...	1	2
Ophthalmia Neonatorum ...	4	...	...	1	1	2	...	1	9
Encephalitis Lethargica ...	1	...	...	...	...	...	1	...	2
Malaria ... ..	...	...	...	...	1	...	...	...	1
Acute Pneumonia	24	...	5	6	1	6	...	2	44
Influenzal Pneumonia	1	...	...	...	...	1	...	...	2
Puerperal Pyrexia	5	...	3	4	2	...	...	...	14
Pulmonary Tuberculosis ...	14	6	4	5	5	5	3	3	45
Non-Pulmonary Tuberculosis	6	1	5	1	3	4	3	...	23
Cerebro-Spinal Fever ... ..	...	...	...	...	1	1	...	...	2
Total	100	51	45	40	39	55	10	12	352

Age-Periods.

	All Ages	-1	1-5	5-15	15-25	25-45	45-65	65+
Enteric Fever	1	...	...	...	...	1	...	...
Scarlatina	134	...	43	67	14	10	...	...
Diphtheria	55	1	5	33	9	4	3	...
Erysipelas	18	...	...	...	3	4	8	3
Puerperal Fever	2	...	...	...	...	2	...	...
Ophthalmia Neonatorum	9	9	...	...	...	...	...	...
Malaria	1	...	...	...	...	1	...	...
Encephalitis Lethargica	2	...	...	...	...	1	1	...
Acute Primary								
Pneumonia	44	3	9	8	2	7	6	9
Acute Influenzal								
Pneumonia	2	...	...	...	...	...	1	1
Puerperal Pyrexia	14	...	...	...	6	8	...	...
Cerebro-Spinal Fever ...	2	1	...	...	1	...	...	...
Pulmonary Tuberculosis	45	...	1	12	10	16	6	...
Non-Pulmonary Tuber- culosis	23	1	4	8	4	4	...	2
Total	352	15	62	128	49	58	25	15

Enteric Fever.—Only one case was notified—a man resident in Lockerbie District. His symptoms were not typical, bacteriological examinations gave negative results, and the serological tests were inconclusive. After observation in hospital it was decided that the evidence did not definitely exclude the possibility of his having had Enteric Fever, and that diagnosis was finally accepted for record purposes. The history gave no indication as to how the infection had been acquired.

The statistics of the notified cases of Enterica in the County and Small Burghs during the last five years have been :—

1932. 1933. 1934. 1935. 1936.

Cases	.....	5	7	0	3	1
Deaths	.....	...	...	...	..	...
Morbidity per 1000	.....	0.08	0.12	0	0.06	0.02
Mortality per 1000	.....	.....	...	..	..	...
Case-fatality per 1000	.....	.....	...	...	...	...

Scarlatina.—One hundred and thirty-four cases were notified. This is 68 less than in 1934.

The decrease was most evident in the Lockerbie, Moffat, and Langholm Districts, which had 31, 1, and 5 cases respectively, against 50, 14, and 39 in the previous year. Thornhill and Dumfries, on the other hand, shewed an increase on the figures for 1935. It is rather remarkable that Thornhill District has for several years had a distinctly higher incidence of Scarlatina than might be expected. With a little over 12 per cent. of the population of the County and Small Burghs, it has had during the last six years an average of more than 20 per cent. of the total Scarlatina.

The very low incidence in Sanguhar District—4 cases in a population of over 5500—is noteworthy. The disease was prevalent in that part of the County in 1931-32, and it is probable that a fairly high degree of immunity still persists in consequence. It is to be hoped that Langholm District may enjoy a similar immunity for some time as a result of its experience in 1934-35.

Two members of the same household were affected in nineteen instances, and three members in five instances.

The percentage of return cases was 1·4 per cent., as against 3·8 per cent. in the previous year and 14·9 per cent. in 1934.

There was a small outbreak in the neighbourhood of Hightae during the early part of the year. Four cases were removed to hospital in February, and the return home of two of the patients at the end of March was associated with a fresh outbreak affecting six persons. Infection was probably by personal contact, though in the case of one patient it may possibly have been conveyed by milk.

Fourteen cases occurred in the vicinity of Thornhill in June. Families in Morton, Penpont, and Keir were affected, and the suddenness of the outbreak suggested

some common cause, but no connection between the various groups could be traced.

Of the hundred and thirty-four cases notified, one hundred and twenty-eight were removed to hospital.

The statistics of Scarlatina in the County and Small Burghs during the last five years have been :—

			1932.	1933.	1934.	1935.	1936.
Cases	.....	.....	143	144	376	202	134
Deaths	.....	.....	.....	1	4	.....	3
Morbidity per 1000	.....	.....	2·4	2·4	6·5	3·4	2·3
Mortality per 1000	.....	.....	.....	0·018	0·07	.....	0·05
Case-fatality per 1000	.....	.....	.....	6·9	10·6	.....	22·4

Diphtheria.—Only fifty-five cases were notified, which is 25 less than the number in 1935 and 10 less than the average for the last ten years. So far as the actual number of notifications can be taken as indicating the prevalence of the disease, it would seem as though Diphtheria were becoming less prevalent in the County, the average number of cases notified in successive quinquennia since 1915 being 124·8, 106·6, 82·6, and 56·4 per annum. The question is complicated, however, by the difficulty of distinguishing between “ Clinical ” and “ Bacteriological ” Diphtheria, and the total figures are, of course, too small to permit of dogmatism.

There was no specially heavy incidence on any part of the County during 1936. Sanquhar District had the largest number of cases—22. Those, however, did not constitute an outbreak, but were scattered throughout the year. No cases were reported from Langholm or Moffat Districts.

Of the 55 cases notified, 32 were bacteriologically confirmed. In the remainder, such confirmation was not available.

The statistics of Diphtheria in the County and Small Burghs during the last five years have been :—

			1932.	1933.	1934.	1935.	1936.
Cases	.....	.....	43	31	79	80	55
Deaths	.....	.....	4	2	5	5	3
Morbidity per 1000	.....		0·7	0·6	1·3	1·3	0·9
Mortality per 1000	.....		0·07	0·03	0·08	0·08	0·05
Case-fatality per 1000	.....		93	64	63	63	54

Pneumonia. — Forty-four cases of Acute Primary Pneumonia were notified during the year, an increase of 7 on the number for 1935. It has always been realised that many cases of this disease escape notification. During 1936 there were 39 deaths registered as due to Pneumonia (all forms). As the average case-fatality of Acute Primary Pneumonia is about 20 per cent., it is evident that the total number of cases occurring in the County must be greatly in excess of the number notified.

This is natural. There is little difficulty about notification of cases of Scarlatina, Diphtheria, Tuberculosis, etc., because it is generally recognised as a necessary preliminary to action taken for the benefit of the patient or the community. In the case of Pneumonia, on the other hand, notification leads to nothing. One or two cases may be removed to hospital in the course of a year, but beyond this the notifications are of no interest or value to the patient, the practitioner, or the Medical Officer of Health.

The hospital treatment of Pneumonia is now undertaken by many local authorities in Scotland, and I suggest that the time has now arrived when the expediency of arranging for such treatment in Dumfriesshire should be seriously considered. It has been impracticable hitherto, as the four small isolation hospitals at present serving the County are neither equipped nor staffed for this purpose. If, however, the scheme for enlarging Lochmaben Hospital and centralising all treatment of infectious diseases should

come to fruition, it should be possible to provide for the modern treatment of Acute Pneumonia being given there. The experience of recent years indicates that serum treatment may materially reduce the fatality of some forms of the disease.

One difficulty would, no doubt, be the removal of patients to hospital. Pneumonia is a disease which does not "travel" well, and it is undesirable that patients should be moved after the third or fourth day of the disease. Moreover, the best results from serum treatment can be expected only when that treatment is begun as early as possible. There is little reason to doubt, however, that if modern treatment of Pneumonia were made available at Lochmaben Hospital the difficulty of getting cases notified and removed sufficiently early would soon be overcome.

Cerebro-Spinal Fever.—Two cases were notified, one from Gretna, the other from Lockerbie District. The former, an infant, died before admission to hospital could be arranged. The latter, a youth, was diagnosed in the Dumfries and Galloway Royal Infirmary and removed to Annan Hospital, where he died 60 days later.

Undulant Fever.—One case of this (non-notifiable) disease was removed to Lochmaben Hospital, and was still under treatment there at the end of the year. The history indicated that this was possibly a case of milk-borne infection.

The other infectious diseases dealt with during the year require no special comment.

The report on Tuberculosis will be found on page 24.

K. SCHOOL CLOSURE.

It was not found necessary to close any schools during the year.

L. LIST OF HOSPITALS.

M. BRIEF REVIEW OF THE HOSPITAL POSITION IN THE AREA.

As noted in my Annual Report for 1935, discussions were begun in that year between representatives of the Department of Health for Scotland and of the local authorities as to the development of hospital services in south-west Scotland. Those discussions were carried a stage further during the year under review. Eventually a sub-committee of local authority representatives was appointed, and met representatives of the Directors of the Dumfries and Galloway Royal Infirmary during October. Certain preliminary considerations were discussed, and it is hoped that material progress may be made during the current year.

At present the representatives of the local authorities are concerned mainly with the provision of institutional treatment for persons coming within the scope of their approved schemes—*i.e.*, Maternity and Child Welfare, Medical Treatment of School Children, Tuberculosis and Venereal Diseases—and of those who are entitled to medical attendance under the Poor Law. It is being kept in mind, however, that schemes under Section 27 of the Local Government (Scotland) Act of 1929 may have to be considered at a later date, and that arrangements made meantime should be capable of future extension to meet the needs of such schemes.

The suggestion that the isolation and treatment of patients suffering from infectious diseases should be centralised at Lochmaben was made in my Annual Report for 1930. It was approved in principle by the Sub-committee on Medical Services, but no action has yet been taken, as the facilities for water supply in the area did not justify extensions to the existing hospital. That difficulty is now in process of solution, and it is to be hoped that the question of centralisation can be considered again

in the near future. In my report of 1930 I recommended that the accommodation at Lochmaben should be increased by 33 beds to a total of 68, on the assumption that provision was to be made only for the diseases dealt with at present. At a conference with a representative of the Department of Health in 1935 it was suggested that a total of 90 beds was desirable, on the grounds that certain diseases, at present being treated in general hospitals, will in future come under the care of the local authorities.

The institutional treatment of sick persons in receipt of public assistance is an aspect of the hospital problem which requires special attention. At present those who are acutely ill can generally be admitted to the Dumfries and Galloway Royal Infirmary without much delay. They, however, represent only a small proportion of the total. For the majority of sick persons on the public assistance roll the only form of institutional treatment which can be offered is removal to Rowantree House. Despite the many improvements made there in recent years, the rooms used as sick wards cannot be regarded as in accordance with modern ideas. Further, it is undesirable that for people who can support themselves under ordinary circumstances, and who have to apply for Public Assistance only on account of illness, admission to the poors-house should be the only way of obtaining institutional treatment.

The following table shews the work done in the County isolation hospitals during the year :

		Lochnaben.	Annan.	Thornhill.	Langholm.	Total
Total admissions	.....	115	58	72	.....	245
Total discharges	.....	107	51	75	.....	233
Total deaths	.....	7	3	.....	.....	10
Average detention (days)	.....	44.4	32.6	35	.....	.....
Average beds occupied	.....	13.8	4.5	11	.....	.....
Highest number	.....	25	9	18	.....	.....
Lowest number	.....	3	1	1	.....	.....
Surgical operations under general or spinal anæsthesia	.....	.....	2	1	.....	3
Other operations	.....	3	1	2	.....	6

N. AMBULANCE SERVICE.

As noted in last year's report, the motor ambulance at Thornhill Hospital proved unfit for further use and had to be replaced. In view of possible changes in the ambulance service which may result from the proposed centralisation of hospitals, the Committee decided to obtain a second-hand ambulance, if possible, as a temporary measure. There are, as a rule, few second-hand ambulances for sale, but after making enquiry a 14 h.p. Morris ambulance was obtained at a very reasonable price. It was found after purchase that considerable extra expenditure was necessary to put it in good running order. Since that was done it has given fairly efficient service.

The Annan ambulance is still running, but there are complaints of discomfort caused to persons conveyed in it. It affords an example of the difficulty of getting a satisfactory ambulance by attempting to adopt a commercial chassis to a purpose for which it was not designed.

O. OUT-PATIENTS' DEPARTMENT.

The only out-patient service given by the County Council at present is that at Kirkbank Clinique, which is described below.

P. MEDICAL CARE AND NURSING OF THE SICK POOR.

No material change has been made on the arrangements formerly reported. Reference has already been made to the desirability of having available institutional treatment for the chronic sick other than what is provided at Rowantree House.

Q. VENEREAL DISEASES.

During the year ending 31st December, 1936, 102 new cases were treated at the Clinic at Kirkbank.

Of these 23 (12 male, 11 female) were Syphilis.

66 (61 male, 5 female) were Gonorrhœa.

12 (8 male, 4 female) were Non-specific Venereal.

1 (male) was Non-Venereal.

Of the Syphilis patients 6 were congenital cases.

Seventy-eight old cases continued treatment.

Attendances totalled 1898.

It will be seen that cases of Gonorrhœa amount to 64·7 per cent. of the total, and that the proportion of Gonorrhœa to Syphilis is almost 3 to 1. The continued prevalence of Gonorrhœa is largely due to the fact that in the female the disease may cause so little pain and inconvenience as to remain unsuspected, and consequently untreated, thus continuing to be a source of infection.

The age-incidence of new patients was as follows :—

	Syphilis.		Gonorrhœa.		Non-specific Venereal.	
	M.	F.	M.	F.	M.	F.
Under 5 years	1	.....	.....	.....	...	...
5 and under 15	1	3	.....	1	...	...
15 and under 25	4	5	34	3	5	4
25 and upwards	6	3	27	1	3	.....
	<hr/>		<hr/>		<hr/>	
	12	11	61	5	8	4
	<hr/>		<hr/>		<hr/>	

Attendances have been satisfactory, and, as before, arrangements have been made, as far as possible, to accommodate patients whose work precludes attendance at the specified hours. The substitution of Gonacrine tablets, which the patient can carry about, has been found of increasing advantage as a substitute for irrigation for those working at a distance from the Clinic.

Patients have shown little or no intolerance to the arsenical preparations used in the treatment of Syphilis. Of comparatively recent preparations Acetylarsan, owing to its painlessness as an intra-muscular injection, is especially valuable in the treatment of children. The use of Mapharside has not been sufficiently prolonged to allow of comment, but results are, so far, favourable.

R. TUBERCULOSIS.

The total number of notifications of Tuberculosis—68—from the County Landward and Small Burghs is the smallest recorded since the disease was made notifiable. It is 26 less than the number for 1935, and 60 less than the average for the decade 1926-35.

The statistics of notification from 1914 onward are given in the following table :—

Year.	Total Notifications.	Pulmonary.	Non-Pulmonary.	Rate per 100
1914	..... 131	83.2%	16.8%	2.4
1915	..... 134	66.4%	33.6%	2.5
1916	..... 198	71.7%	28.3%	3.4
1917	..... 171	68.4%	31.6%	2.6
1918	..... 157	74.5%	25.5%	2.4
1919	..... 139	68.3%	31.7%	2.3
1920	..... 127	74.0%	26.0%	2.2
1921	..... 138	70.0%	30.0%	2.3
1922	..... 118	68.6%	31.4%	2.0
1923	..... 134	63.4%	36.6%	2.3
1924	..... 151	58.9%	41.1%	2.5
1925	..... 156	70.0%	30.0%	2.6
1926	..... 140	50.0%	50.0%	2.3
1927	..... 138	60.1%	39.9%	2.3
1928	..... 146	66.4%	33.6%	2.4
1929	..... 148	54.7%	45.3%	2.5
1930	..... 134	56.0%	44.0%	2.3
1931	..... 121	53.7%	46.3%	2.0
1932	..... 123	53.7%	46.3%	2.1
1933	..... 118	55.9%	44.1%	2.1
1934	..... 119	60.0%	40.0%	2.2
1935	..... 94	54.2%	45.8%	1.6
1936	..... 68	66.2%	33.8%	1.2

The death-rate from all forms of Tuberculosis was 0.58 per 1000. This is the second lowest death-rate hitherto recorded. The Pulmonary and Non-pulmonary rates were 0.43 and 0.15 respectively.

The fall in the death-rate from Tuberculosis since 1891 is shewn in the following table :

		Pulmonary.	Non-Pulmonary.	Total.
1891-1910 (mean)	.....	1·647	0·692	2·339
1911-1920 (mean)	.....	1·028	0·353	1·381
1921	.....	0·839	0·117	0·956
1922	.....	0·859	0·214	1·073
1923	.....	0·910	0·240	1·150
1924	.....	0·699	0·290	0·989
1925	.....	0·921	0·301	1·222
1926	.....	0·693	0·270	0·963
1927	.....	0·722	0·387	1·109
1928	.....	0·828	0·236	1·064
1929	.....	0·510	0·209	0·719
1930	.....	0·543	0·156	0·699
1931	.....	0·46	0·34	0·79
1932	.....	0·62	0·12	0·74
1933	.....	0·42	0·28	0·70
1934	.....	0·49	0·21	0·70
1935	.....	0·32	0·21	0·53
1936	.....	0·43	0·15	0·58

Dr Robertson reports as follows :—

“During the year ending 31st December, 1936, 68 cases were notified to this department.

Of these 45 (25 male, 20 female) were Pulmonary, and
23 (12 male, 11 female) were Non-pulmonary.

The Non-pulmonary cases comprised :—

Superficial Glands	.....	.....	.....	9
Abdomen	.....	.....	.....	4
Bones and Joints	.....	.....	.....	3
Spine	.....	.....	.....	2
Lupus	.....	.....	.....	1
Other Parts and Organs	.....	.....	.....	4

Occupational Incidence.

School	.....	22
Domestic	.....	14
Under school age	.....	6
No occupation	.....	5
Crichton Royal Institution	.....	4
Farm Worker	.....	4
Shop Assistant	.....	4
Joiner	.....	2
Labourer	.....	2
Student, Roadman, Gamekeeper, Rabbit-trapper, Post Office Messenger (each)	.....	1
Total	.....	68

Disposal of Cases.

Admitted to Sanatorium or Hospital	.....	33
Inmates of Crichton Royal Institution	.....	4
Out-Patient Treatment at Sanatorium	.....	2
Domiciliary Treatment	.....	16
Previous Treatment in Sanatorium or Hospital	.....	2
Left County	.....	1
Died	.....	10
Total	.....	68

The fatal cases included three of Tubercular Meningitis all occurring in January, but apparently sporadic, no connection being traceable. The total number of notifications is the lowest recorded: the average number per annum since 1914 is 138 as against 68 for the past year. It is difficult to assign any reason for this sudden drop; possibly a more retrospective view after the lapse of a few years may throw some light upon it."

S. MATERNITY AND CHILD WELFARE AND SCHOOL HEALTH SCHEMES.

(I) MIDWIVES (SCOTLAND) ACT, 1915; MIDWIVES AND MATERNITY HOMES (SCOTLAND) ACT, 1927.

Notice of intention to practice in the County and Small Burghs was given, as required by Section 18 of the principal Act by 13 midwives.

The following is an extract from the return made to the Department of Health for Scotland for 1935.

	Total in Area.	In Midwives' Practice.
Births	923	68
Deaths within 10 days of birth	23	.....
Cases of Ophthalmia Neonatorum	9	2
Cases of Puerperal Sepsis	2	.....
Deaths from Puerperal Sepsis	2	.....
Cases of Puerperal Pyrexia	14	.....
Deaths from Puerperal Pyrexia	.....	.....
Still-births	24	.....

Medical aid was summoned by midwives under Section 22 of the Midwives (Scotland) Act, 1915, in 8 cases.

Nine expectant mothers were admitted to hospital. In respect of one of those a somewhat unusual problem arose. The mother's removal to hospital had to be arranged as a matter of urgent necessity. There was a family of young children for whose care arrangements had to be made. There was no relative available to come and take charge of the household, and no accommodation in the house for a temporary home help. Finally 2 of the children were taken in by a relative in another part of the County, and the others were removed to Eskdale Hospital, which had been empty for some time. They remained there under the supervision of the caretaker and his wife until their mother's return from hospital.

Twenty-seven domiciliary visits to Midwives and 19 visits to District Nurses were made during the year.

Maternity Homes.—There are no registered Maternity Homes in the County. Moffat Cottage Hospital, which has a maternity ward, is exempted from registration under Section 15 (1) (a) of the 1927 Act.

Application was made in terms of Section 9 (2) of the same Act for registration of a maternity home. After the premises which it was proposed to register had been visited and the circumstances discussed with the applicant. the application was withdrawn.

(2) NOTIFICATION OF BIRTHS ACTS, 1907-1915.

The total number of births notified in the County and Small Burghs was 923. This includes 24 still-births. which are notifiable though not registered.

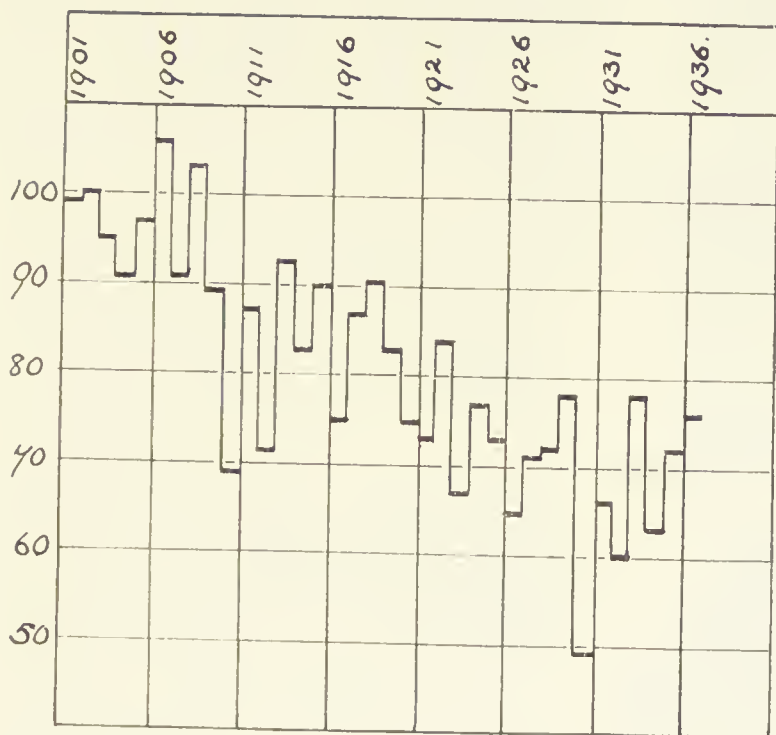
In addition, transfers regarding 141 infants under 1 year, and 60 children aged 1 to 5 were received from other authorities.

(3) VISITATION AND SUPERVISION.

The total number of domiciliary visits paid by Health Visitors and District Nurses during the year was 33,421. of which 27,710 were under the Maternity and Child Welfare Scheme. The following table shews the distribution of the work :—

STATUTORY DUTIES OF NURSES AND HEALTH VISITORS. Visits during 1936.

Quarter	Tuberculosis.	Maternity.				Children (Under one year).	Children (1-5 years).	School Children.	Total.
		Ante-Natal.		Post-Natal.					
		First Visits.	Re-visits.	First Visits.	Re-visits.				
1	409	131	312	99	1,304	2,473	2,703	939	8,370
2	441	120	366	107	1,629	2,639	2,682	1,280	9,264
3	305	107	299	107	1,315	2,386	2,236	567	7,822
4	335	93	312	108	1,330	2,492	2,360	1,435	8,465
Totals	1,490	451	1,289	421	5,578	9,990	9,981	4,221	33,421



Infantile Mortality :
Deaths per 1000 births.

There are 19 local nursing associations in the County, employing 24 nurses. The associations, the number of nurses employed, and the areas served are shewn in the following table :—

Name of Association.	Area Covered.				No. of Nurses.
Glencairn ...	Glencairn Parish	...	...	...	1
Thornhill ...	Morton, Closeburn, Durisdeer	...	...	...	1
Ruthwell ...	Ruthwell Parish	...	...	...	1
Dalton and Mouswald.	Dalton and Mouswald and parts of Dryfesdale and Lochmaben	...	...	...	1
Annan ...	Annan Burgh and Parish, and Cummertrees	...	...	...	2
Sanquhar and Kirkconnel.	Sanquhar and Kirkconnel Parishes	...	...	...	2
Dunscore ...	Dunscore and Holywood Parishes	...	...	...	1
Lockerbie and District.	Dryfesdale (including Lockerbie Burgh), St. Mungo, Tundergarth, Hutton and Corrie, and Applegarth...	...	...	...	2
Lochmaben ...	Lochmaben Parish and Burgh of Lochmaben	...	...	...	1
Kirkmichael and Garrel.	Kirkmichael	...	...	...	1
Lower Annandale	Dornock, Gretna, Kirkpatrick-Fleming, Half-Morton	...	...	...	3
Canonbie ...	Canonbie Parish	...	...	...	1
Penpont ...	Penpont, Keir. and Tynron	...	...	...	1
Moffat ...	Moffat and Kirkpatrick-Juxta	...	...	...	1
Kirkmahoe ...	Kirkmahoe Parish	...	...	...	1
Eskdalemuir, Ewes, Westerkirk, Langholm.	Eskdalemuir, Ewes, Westerkirk, Langholm Landward and Burgh...	...	...	...	2
Tinwald, Torthorwald, and Locharbriggs District.	Tinwald, Torthorwald, and Village of Locharbriggs	...	...	...	1
Hoddom ...	Hoddom Parish	...	...	...	1

There are still no arrangements for nursing in Middlebie, Johnstone, Wamphray, Caerlaverock, the village of Wanlockhead, and the greater part of Dumfries Landward.

(4) MATERNAL AND INFANTILE MORTALITY.

The maternal mortality-rate was 6·2 per 100 births (v. page 4).

The infantile mortality-rate was 76 per 1000 births, an increase of 4 on the rate for the previous year (v. page 4).

The chart on page 31 shews the fall of the infantile mortality-rate since the beginning of the present century.

(5) PROVISION OF FOOD AND MEDICINES.

The following table gives details of those :—

	1936.	
	Mothers.	Children.
1. Number of persons supplied with Liquid Milk, Dried Milk, Milk Substitute, and other Food Preparations... ..	52	152
2. Liquid Milk (total quantity supplied) :—		
Grade—Certified	235½ galls.	949 galls.
Grade—Tuberculin Tested	299 galls.	907 galls.
Grade—Non-graded	542 galls.	1333½ galls.
3. Dried Milk and other Milk Substitutes :—		
Total quantity supplied (lbs.) ... ..		...
Specify Preparations ... ..		...
4. Other Food Preparations* :—		
Specify Ovaltine, Meat Juice, Virol, Eggs, Cod Liver Oil and Malt Cream, Halibut, and Haliveroil	51	117
Virol only	1	29
Cod Liver Oil and Malt only		5
Cod Liver Oil Emulsion		1
5. Total Cost to Local Authority (show under Heads 2, 3, and 4 separately if possible) :—		
(2) Milk and Eggs		£549 16 3
(3) ... ..		...
(4)		44 19 3
Amount recovered by Local Authority		1 2 0
Net Cost		593 13 6

* *Note*.—Many of the recipients of other Food Preparations were also receiving Milk.

Forty-eight school children are included in the above numbers. Those are mostly children who had been in receipt of milk, etc., under the Maternity and Child Welfare Scheme before reaching school age.

(6) MATERNITY SERVICES.

The following is an extract from a report on Maternity Services in the County and Small Burghs, prepared in accordance with the directions of the Department of Health for Scotland :

“ *A. Statistics.*

The total number of births and maternal deaths occurring in Dumfriesshire is too small to permit statistical conclusions being based upon them. The figures for the last 15 years are given, for what they are worth, in the annexed table. Column 5 of that table shows the rate for each year as the average for the quinquennium of which it is the centre. It will be seen that the rate so calculated varies between 4·9 and 6·5 per 1000 births and probably differs little from that of Scotland, which is at present about 6 per 1000.

B. (The County Council's Maternity and Child Welfare Scheme is dated 12th February, 1920, and should be read along with this report.)

The services provided for maternal welfare are still very incomplete. They may be considered as Ante-natal, Intra-natal, and Post-natal.

(1) *Ante-natal.*

There are no ante-natal clinics in the County. The population is scattered over a wide area, and even a multiplicity of clinics could serve only a comparatively small number of persons. It has therefore been necessary to develop ante-natal care as a domiciliary service.

In every part of the County in which local nursing associations exist—that is, in all parts except the parishes of Middlebie, Johnstone, Wamphray, part of Dumfries Landward, and Caerlaverock, and the isolated village of Wanlockhead—the County Council pays a contribution to the association towards the maintenance of one or more nurses, who perform the statutory duties required under the Maternity and Child Welfare Scheme. It is a condition that those nurses have had maternity training and hold the Certificate of the Central Midwives Board. They do a fair amount of ante-natal supervision. Even in a sparsely populated area an energetic nurse, who gains the confidence of the people, can get in touch with a good many expectant mothers. The percentage of

women in the County who receive some ante-natal supervision by district nurses has risen from 36·2 per cent. in 1931 to 50 per cent. in 1935. (It must be remembered that the residue comprises a number of expectant mothers in easy circumstances who make private arrangements, and do not come under the Council's Scheme at all, so that the total amount of ante-natal supervision is probably considerably more than the figures suggest.) In those parts of the County where there are no local nursing associations, ante-natal care has to be carried out, so far as may be, by the two County Health Visitors. Useful work is done in this way, but it is obvious that such supervision can never be complete or constant, as some of the areas concerned are at a long distance from Dumfries.

A serious weakness in the scheme is that there is no proper provision for cases in which the nurse or health visitor finds that the case should be referred to a doctor for examination or treatment. The Maternity and Child Welfare Scheme allows for the provision of a doctor only in the case of 'necessitous' women. Even if one translates the term 'necessitous' fairly broadly, it remains an abstacle to the satisfactory working of the scheme. There are many women who do not realise the necessity for ante-natal supervision. To inform them that they should be examined three times during pregnancy (as the Department of Health recommends) and that, not being 'necessitous,' they must themselves arrange for payment of the doctor, is merely to make sure that they will neglect the advice. It is a matter of public interest that an expectant mother's health should be preserved and her life safeguarded, and it is not expedient that she should be required to prove poverty before adequate steps for her protection can be taken.

So far as institutional treatment is concerned, no satisfactory provision exists. A small number of urgent cases are sent every year to maternity hospitals in Edinburgh or Glasgow. Those are invariably recommended by their own doctors. There is at present no accommo-

dation for pre-natal cases at the Dumfries and Galloway Royal Infirmary.

(2) *Intra-natal.*

The great majority of confinements in the County are attended by doctors. There are at present only 12 registered midwives, and they conducted only 66 confinements in 1935.

Except at Moffat Cottage Hospital, which has a Maternity Ward of 3 beds, there is no institutional provision for confinements. Emergency cases—i.e., those requiring immediate surgical interference—are sometimes admitted to the Dumfries and Galloway Royal Infirmary, where they have to be dealt with in the ordinary surgical wards. A certain number of confinements of women on the poors roll takes place in Rowantree House.

There is, of course, no possibility at present of providing institutional treatment for the case of the woman who, though apparently likely to have a normal confinement, is so badly housed, or so remote from medical assistance that she should not be confined in her own house.

(3) *Post-natal.*

The only arrangements made under the Scheme for post-natal domiciliary care is visitation by district nurses and health visitors. Those paid 6689 post-natal visits in 1935.

No special provision is made for cases of Puerperal Pyrexia or Puerperal Fever, the Medical Officer of Health being instructed to make such arrangements as appear most suitable when occasion demands. I arrange for consultation by members of the medical or surgical staff of the Dumfries and Galloway Royal Infirmary in cases where the practitioner in charge of the patient desires a second opinion, but there is no panel of consultants, no regular procedure, and no scale of fees.

Institutional treatment when required must generally be given in one of the county isolation hospitals. At

Lochmaben only is there sufficient staff to permit of adequate isolation of puerperal cases, and that only if the hospital is not full. It is, of course, admitted as a matter of principle that puerperal fever, and certain cases of puerperal pyrexia, may be properly treated in fever hospitals, but in practice this can be done successfully only if the institution is of fair size.

There is no arrangement for providing 'home helps' during the puerperium. I have on occasion been able to arrange for such assistance, but housing conditions in rural areas are generally unsuitable for the purpose.

C. Recommendations.

1. Steps should be taken to ensure the services of a district nurse with the Central Midwives Board Certificate in all parts of the County. If it appear that voluntary effort has gone as far as it can in this matter, the local authority should consider whether the time has not arrived when it should itself take over responsibility for the nursing service. That would permit a re-arrangement of areas, uninfluenced by local subscriptions or parish susceptibilities, which would probably allow of the whole County being served at no greater expense than a part of it is at present.

2. Arrangements should be made by which each expectant mother may be examined at least three times during pregnancy by the doctor who will conduct the confinement. (See recommendation 11, page 26 of the Department of Health's Report on Maternal Morbidity.) The fee for this, and some caess, travelling expenses, would be paid by the local authority, with the possibility, in some cases, of recovering all or part of it.

3. Facilities for consultation by an obstetrician of approved standing should be provided. (See below.)

4. Facilities for out-patient consultation and treatment at a central institution should be provided. (See below.)

5. Arrangements should be made, if possible, between the local authorities concerned and the Directors of the

Dumfries and Galloway Royal Infirmary for provision of an obstetric department of 30-40 beds. (See my report of 22nd November, 1935.) This department should be under the direct charge of a resident medical officer of experience. There should also be a consultant obstetrician of acknowledged standing, and the services of both should be available for consultation when desired by practitioners taking part in the suggested maternity scheme. The obstetric department would presumably provide facilities for out-patient consultation and treatment in cases where those were desirable.

6. Facilities similar to the above for gynaecological cases should also be provided at the Dumfries and Galloway Royal Infirmary.

7. It has already been recommended that all cases of infectious disease occurring in the County should be isolated at Lochmaben. This would free the hospitals at Annan, Thornhill, and Langholm for other purposes. Whether any of the accommodation thus made available could be utilised for the purposes of the Maternity and Child Welfare Scheme is a matter for future consideration.

8. An early opportunity should be taken to recast and modernise the Maternity and Child Welfare Scheme of 1920.

In my opinion those recommendations indicate the lines along which the Maternity Service in the County should be developed. There are, of course, a great many details which will require consideration and adjustment, but I do not think that any good purpose would be served by attempting to discuss them at this stage. It does seem desirable, however, that the Committee should discuss the proposals I have outlined at an early date. Until they have been approved or disapproved, in principle, little can be done in the way of working out details."

DUMFRIESSHIRE, COUNTY LANDWARD, AND SMALL
BURGHES.

Maternal Deaths.

(1) Year.	(2) Births.	(3) Maternal Deaths. (a) Sepsis. (b) Other Causes.	(4) Maternal Mortality Rate per 1000 Births.	(5) Quinquennial Averages.
1921	1373	2 4	6 4.3	....
1922	1328	5	5 3.7	....
1923	1348	2 5	7 5.2	4.9
1924	1229	2 5	7 5.7	5.3
1925	1203	1 6	7 5.8	6.0
1926	1261	8	8 6.3	5.5
1927	1105	3 5	8 7.2	6.1
1928	1104	1 2	3 2.7	6.4
1929	1058	2 7	9 8.5	6.5
1930	1049	5 3	8 7.6	5.3
1931	1029	1 6	7 6.8	5.6
1932	1021	1	1 0.9	5.5
1933	934	4	4 4.3	5.5
1934	990	2 6	8 8.0	
1935	945	1 6	7 7.4	

**T. MILK & DAIRIES (SCOTLAND) ACT, 1914, AND
ASSOCIATED ORDERS.**

Mr Sangster reports as follows :—

In accordance with Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914, and circular letter No. 2 of 29th December, 1936, from the Department of Health for Scotland, I herewith submit the following report for the year ending 13th December, 1936.

ANY MATTERS OF GENERAL INTEREST.

It will be appreciated that the subject matter of this report represents a very heavy programme of work, in addition to the duties (not included here) under the requirements of the Diseases of Animals Acts and Orders.

The activities of the Milk Marketing Board have given stability to the business of milk production, and increased

consumption of liquid milk. Now that the primary difficulties have been overcome, it is to be hoped that further advances will follow, particularly in the grading up of the whole supply.

The stipulation that wherever possible Certified or Tuberculin Tested grades had to be used in the Scheme to provide milk at reduced price to school children has increased consumption of these grades and stimulated interest in the clearing of herds from Tuberculosis. Ultimately, it should lead also to the increased general consumption, which is so greatly desired in the drive for improved health.

The improved methods of milk production mentioned in previous reports have been employed by an increasing number of owners, but a great deal remains to be tackled, and much time could be profitably spent in visiting farms during milking times.

Possibly due to minor labour troubles and the fear that these might become more acute, there has been a steady increase in the installation of milking machines. From a public health point of view this is an advantage, as modern machines, when intelligently handled and properly sterilised, are very efficient, and furthermore lessen the risk of contamination from human source.

Filtration test. — The use in Milk Factories and Creameries of the filtration test as a control of clean production is not helpful, and may be the reverse, as producers, so long as they use filters and filter cloths, get good tests without even washing their utensils, let alone sterilising them. On receiving continued good reports such producers practically gave up scalding or sterilising as apparently unnecessary. Filter cloths should be abolished, and special filter pads used.

During the summer, the system of transport could not be considered satisfactory. Cans of milk are left at road-ends, exposed to the sun, awaiting conveyance on a vehicle, destitute of any arrangement for their protection, save for an occasional tarpaulin. It is altogether wrong that the

care and attention given to the production of high grade milk should be wasted in this prodigal manner.

As stated in previous reports, there again arises the question of the urgent need for a definite official standard of cleanliness and Butter Fat Content for non-graded milk, unless Standard milk is to be recognised as the lowest grade of milk in the Liquid Market. This would also eliminate the arbitrary standard of Butter Fat Content, and would ensure that the public were reaping the benefit of the higher Butter Fat Content. At present it is doubtful if they do.

For a good number of years now, the Veterinary Staff has advised on and supervised all construction and reconstruction of dairy premises. Much practical knowledge concerning premises has been gained from experience, and has been made available to all who wished to undertake such work. It is gratifying to report that both owners and employees have expressed appreciation of the benefits of such service. It is of paramount importance to the health and comfort of the animals that they be housed in properly constructed buildings, which are, moreover, almost essential for the production of clean milk.

TUBERCULOSIS (ATTESTED HERDS) SCHEME (SCOTLAND), 1936.

This Scheme, introduced in 1935, was amended in 1936, with a view to making it more attractive to farmers, by allowing the payment from public funds of one penny per gallon for all milk produced from attested herds, and sold through the Scottish Milk Marketing Board. Along with other inducements, such as free tuberculin testing of animals, this resulted in twenty herds in this County becoming attested, but all had been previously licensed under the Milk (Special Designations) Order (Scotland) to produce tuberculin tested milk. There has been, however, increased activity in the clearing of other herds, as is shown later in this report. It would have been of great assistance to Local Authorities had it been made a condition of attestation that the premises conform to the local dairy bye-laws,

which require no more than a reasonable standard of structure and arrangement. Such premises also lend themselves to proper cleansing and efficient disinfection.

The conversion of flying herds into self-contained herds continues with beneficial results. No administrative difficulties under the Milk and Dairies Acts were encountered during the year.

REGISTERED PREMISES, CLASSIFICATION AND NUMBER OF COWS.

	Class 1	Class 2	Class 4	Cows.	Class 3	Cows.	Retail	Total Pre- mises	Total Cows.
<i>County.</i>									
Non-Graded	293	280	21	16370	426	2020	8	1033	18390
Graded ...	49	...	...	2139	...	...	...	49	2139
<i>Burghs</i>									
Non-Graded	2	5	...	113	1	3	8	16	116
Total ...	344	285	21	18622	427	2023	16	1098	20645

No. of ordinary dairy premises with steam sterilising plants installed 76

No. of graded dairy premises with steam sterilising plants installed 50

Premises in Class 1 comply with the County Bye-laws in every respect.

Premises in Class 2 fall short of the requirements in some respects.

Premises in Class 3 are registered premises where milk is sold in small quantities and butter made.

Premises in Class 4 are registered premises which fall short of the requirements to a greater degree than those in Class 2.

The total number of unregistered premises is unknown.

Twenty-five new premises were registered during the year and placed in Class 1, and, after reconstruction, fifteen others were raised from a lower class to Class 1.

On many other premises minor recommended improvements have been carried out.

Fifty-three per cent. of registered premises where milk is produced and sold through the Milk Marketing Board now comply with the dairy bye-laws.

There are 1,975 more dairy cows than last year.

During the year, thirty new steam sterilising plants were installed—seventeen in ordinary dairy premises, and thirteen in graded premises. This shows that the advantages of a steam sterilising plant are being appreciated by an increasing number of producers, and as modern plants are economical and easy to run, it is hoped that the increase will be maintained. Although high grade milk can be produced without such a plant, it entails additional work, and the results are not so uniform.

INSPECTION OF HERDS AND PREMISES.

Routine visits of inspection, etc.	.....	.....	.....	1291
Visits re plans, reconstruction and improvement of premises	.....	.....	.....	204
Visits under Milk (Special Designations) Order (Scotland)	.....	.....	.....	496
Total				1991

The requirements of the Act were fulfilled in respect of annual examinations of cattle and inspection of premises, methods, etc., and, in addition, nearly all the herds were examined twice, or more frequently if occasion demanded. As compared with last year 222 more visits of inspection were made. Animals in Class 3 premises were examined only when one of the staff was visiting on other duties or was in the neighbourhood. A large number of the visits of inspection were made at milking times, that is, in the morning from 5 a.m. onwards, and again in the evenings, depending on the time of year. More frequent visits of inspection of dairy herds, and also regular inspection of

Class 3 herds, would doubtless show results. It is hoped, by an increase of staff, to carry out more routine examinations during 1937.

CONDITIONS AND CLEANLINESS OF CATTLE.

Generally, in this part of the country, cows are kept in very good condition all the year round. Most of the dairy farmers attempt to keep up a fairly regular supply of milk throughout the year, and this means artificial feeding during winter months. In the majority of these herds the cows kept their usual good condition. In the few herds where the feeding during the winter months consisted chiefly of hay and turnips the general condition of the animals was worse than usual, owing to most of the hay crop having been secured in poor condition.

The increased number of properly constructed and reconstructed premises is conducive to a cleaner, healthier state of the cows. Correct standings and wide grips make it so much easier to keep cows clean, that many tenant farmers are themselves carrying out alterations, although their premises already comply with the dairy bye-laws. Some farmers still persist in using dirty bedding, which is much worse than no bedding. Where plenty of clean straw is available it should be used, and sawdust also is useful. Practically all dairymen now clip the udders of the cows, but fewer clip the flanks: an old established idea that cows are more liable to take Mastitis if udders are clipped is being gradually dispelled.

(a) Nature of Fodder and Diet as affecting Quality of Milk.

On only a few farms was the fodder secured in the usual good condition, but this did not affect the quality of the milk to any appreciable extent, although some recording farmers complained of reduced production and lowered butter fat content. Beet pulp appears to be becoming a general substitute for turnips, and if fed in normal quantities is satisfactory. Too heavy feeding of the product, however, seems to be attended by danger, as one farmer lost a number of cows, apparently from this cause.

There have been fewer complaints of fishy smell and taint of milk due to this feeding during the past year.

(b) Diseases found on Clinical Examination.	No. of cases.
Tuberculosis	see Table
Mastitis	206
Indurated Udders, not Tuberculosis	44
Teat Eruptions	128
Atrophy (Complete or Partial)	555
Metritis or Retained Placenta	17
Acetonaemia	23
Contagious Abortion	68
Other Diseases	5

In the course of Routine Herd Examination during the year the above diseases were detected. When it was considered necessary to prevent the contamination of the milk, or spread of disease, steps were taken to isolate the animals as far as possible.

The most common disease met with likely to contaminate milk was Streptococcal Mastitis. 206 cows were certified as being affected and their milk prohibited from being put into the supply. To a certain extent, the integrity of the farmer has to be accepted, but we find a few rather anxious to keep up the supply. It is to be hoped this is due to ignorance, and that as knowledge spreads it will be easier to get the purer milk supply.

An increase of 63 cases of Eruption of the Teats was detected, but none of these were considered cases of cow pox.

125 more cases of Atrophy of one or more quarters of the udder were disclosed. Most cases of Atrophy are the result of an attack of Mastitis. With more regular clinical examinations of herds, more control could be exercised on this disease, which can, to a great extent, be controlled.

Four fewer animals were found this year with Retained Placenta. There is nothing so revolting and evil-smelling as an animal standing in a dairy byre suffering from

Retention of the Placenta, and it is only to be expected that milk from such a byre will be tainted.

Acetonæmia.—This is very often due to over-feeding at calving time and immediately after. It is common in herds where the practice is to steam up the cows before calving and to continue force feeding afterwards.

Contagious Abortion.—At first sight it would appear from the table, which shows an increase of 20 cases of abortion in herds, that this disease was on the increase. It might, however, be the case that farmers are becoming less afraid to admit that their herds are infected with this dreaded disease. I still feel that there are more cases of contagious abortion than are recorded here. The steady increase in the number of Tuberculin Tested herds, with the required isolation, should go a long way to diminish the disease.

Undulant Fever in Man.—One case of Undulant Fever in Man was reported during the year. The patient was receiving his milk supply from a herd in the County which was affected with contagious abortion.

Isolation of Diseased Cows and Disposal of Milk.—When it was considered necessary, affected cows were isolated as far as practicable. The milk from diseased animals was either boiled and fed to calves or pigs, or mixed with disinfectant and disposed of.

BOVINE TUBERCULOSIS.

In my last year's report I stated that a large number of farmers were testing their herds. During the year under review this number has increased. Every opportunity has been taken to discuss with the farmers the question of clearing up herds, and many farmers have had their herds tested immediately after such discussion. The tuberculin testing is showing varied results. In most of the self-contained herds the young stock are passing the test very well, with the percentage of reactors running from 1 per cent. to 5 per cent. In a few herds the per-

centage of reactors is well over this, and one would expect that cows giving tubercle bacilli in the milk would be responsible.

The knowledge or the fear that milk from animals which have passed the tuberculin test will, sooner or later, be the only milk allowed on the Liquid Market is not without its effect in stimulating dairy farmers to free their herds from tuberculosis.

Difficulties militating against the successful marketing of "Certified" and "Tuberculin Tested" milk.—See under Milk (Special Designations) Order (Scotland), 1936.

Number of cows found tuberculous on clinical examination of the herds :—

EXTRACT FROM RETURNS UNDER TUBERCULOSIS ORDER OF 1925.
REPORTS MADE ON ANIMALS ON REGISTERED PREMISES.

	Premises producing Milk, etc.	Premises producing Butter, etc.	Total.
Cases reported and examined ...	579	14	593
Cases confirmed and slaughtered ...	137	7	144
Cases found at "Post-Mortem" to be :—			
(a) Advanced Tuberculosis ...	69	3	72
(b) Not Advanced Tuberculosis ...	68	4	72
Cases confirmed and slaughtered found on Herd Inspection by Veterinary Inspectors ...	88	1	89
Tuberculosis of Udder ... ..	...	...	5
Giving Tuberculous Milk ... ..	...	...	7
Tuberculous Emaciation ... ..	...	...	34
Chronic Cough and showing definite clinical signs of Tuberculosis ...	...	...	98
Not affected ... ..	...	...	...
			144

The table above shows the number of cases dealt with under the Tuberculosis Order, 1925, during the year, and classification in accordance with that Order, of the different forms of the disease. The total number of animals slaughtered shows a reduction of 22 as compared with

1935. The total number dealt with is an increase of 7. Seven fewer animals were found on clinical herd inspection by the County Veterinary Inspectors to be amenable to the Order. These figures will vary a little from year to year, and from their face value it is difficult to claim any decrease in the number of tuberculous animals. Animals affected with tuberculosis are becoming confined to certain parts of the County and to certain herds, and fewer obviously affected animals are found.

Steps taken to secure a tubercle-free milk supply.—The advice and explanations given to farmers in past years were continued, and the result is shown in the number of tuberculin tested herds in the County. 80 farmers not licensed under the Milk (Special Designations) Order (Scotland), 1936, submitted their herds to the tuberculin test in 1936. In a number of cases the results are very encouraging and in others they are disappointing; but in such cases the farmers are advised to persevere; and in the majority of cases this advice is being carried out with beneficial results.

LABORATORY EXAMINATION.

(i) Bacteriological Examination of Milk, etc.

Acetone		(a) MILK.					(b) DISCHARGES.			TOTAL.
		Tuberculosis.		Pathogenic Organisms not Tuberculous.	Bacterial Count and Bacillus Coli.		Sputa.			
		Micro.	Bio.		Gr.	N.-Gr.				
+	-	+	+	-	+	-	Gr.	N.-Gr.	+	-
3	9	7	236	6	141	61	194	See under M. (S.D.), O.(S),	30	182
										212

The above table shows the number and results of samples of milk and discharges collected for examination in the County Bacteriological Laboratory. For those taken under the milk (Special Designations) Order (Scotland), see under that Order.

One hundred and thirty-two fewer samples of milk were collected this year as compared with last year, owing to the fact that more work had to be done in other directions.

The 243 samples examined microscopically were from individual cows. The 7 animals responsible for the positive samples were slaughtered under the Tuberculosis Order, and on post-mortem examination 5 were found to be advanced and 2 not advanced.

As regards the 147 Biological tests, 109 were obtained by grouping the bulk samples of 153 farms, most of which were collected after the clinical examination of the herds. One of the 109 samples proved positive, and this sample was a mixed sample of 4 farms. This positive sample necessitated the examination of the milk from each of the 4 farms. One of these prove positive, and the other 3 negative. The remaining 38 tests were obtained by grouping 41 samples which were taken from the more suspicious individual cows and which were negative microscopically. Four of these proved positive. The limited accommodation for guinea pigs prevented all the samples negative microscopically from being tested biologically.

The animals responsible for the 30 positive sputa were slaughtered, and all were suffering from tuberculosis, some in the earlier stages. 15 were advanced and 15 not advanced.

Bacterial Count and Bacillus Coli.

Non-graded milk up to T.T. Standard	....	—	91
Non-graded milk under T.T. Standard		—	73
			<hr/>
			164
			<hr/>

Of the 164 samples tested, 91 or 55·5 per cent. conformed to the standard laid down for Tuberculin tested milk. Practically all the above samples of milk tested for Bacterial Count and presence of *Bacillus Coli* were collected during the summer months and when complaints were received regarding supplies.

(ii) Chemical.

Butter Fat Content.

Non-graded milks 3·5 per cent. and over	...	...	50
Non-graded milks under 3·5 per cent.	..		4
			—
			54
			—

Acidity as Lactic Acid.

·18 per cent. and under	..	..	....	...	13
Over ·20 per cent.	...	..	....	...	2
					—
					15
					—

The above samples were taken when complaints were received regarding supplies.

Tubercle Bacilli in Milk.

During 1936 no reports were received from other authorities of tubercle bacilli having been found in milk which was from this County.

Total number of cows found tuberculous after tuberculin test.

No tuberculin test was carried out under Section 22 of the Act. It was not found necessary to carry out tests under the Tuberculosis Order, 1925.

Notes of samples taken for examination under Section 21 of the Milk and Dairies (Scotland) Act, 1914.

It was not found necessary to take samples under Section 21 of the Act.

Sections 13 and 14 of the Milk and Dairies (Scotland) Act, 1914, are being reasonably well complied with, although a number of farmers are still slow to report suspected cases. Practically all cases of diseased animals reported in Table III. of this report were found when clinical examinations of the herds were being carried out.

Sections 4 to 14 of the Milk and Dairies (Scotland) Order, 1934, have been generally complied with. It has been necessary to draw the attention of several producers to irregularities, among those being the non-sealing of milk churns before handing them over to a common carrier.

MILK (SPECIAL DESIGNATIONS) ORDER (SCOTLAND), 1936.

A number of farmers who are testing their herds will have difficulty in obtaining a T.T. licence because of the premises, as no licence under the Order is granted unless the premises comply with the dairy bye-laws. A little compensation or a better demand for this grade of milk would overcome this difficulty and bring a greater number under this order, and thus a greater number of suitable dairy premises.

	No. of Dairy Cows.	No. of Young Stock.	No. of Gallons Milk produced in 1936.	No. of Gallons fed to calves in 1936.
Holders of licences for the production of—				
(a) <i>Certified Milk.</i>				
Wm. A. Thomson, Dalpeddar, Sanquhar	36	46	23,000	2,000
(b) <i>Tuberculin Tested Milk.</i>				
D. Kirkpatrick, Auchenbainzie, Penpont ...	64	59	52,000	2,500
D. Wilson, Auchenhessnane, Penpont ...	34	39	26,216	750
A. Caldwell, Auchentaggart, Sanquhar ...	32	33	24,471	1,080
Messrs White, Balstack, Lockerbie ...	33	27	26,829	1,580
Mrs Nicholson, Banks, Lockerbie ...	26	21	18,089	744
Messrs Kirkpatrick, Barr, Sanquhar ...	95	125	71,250	3,150
Mrs Keswick, Bellfield, Holywood ...	20	36	15,000	1,010
R. Graham, Blackford, Lockerbie ...	30	40	18,000	800
T. Symington, Cornelbush, Sanquhar ...	38	41	24,811	2,133
J. Cochrane, Byreholm, Penpont ...	40	44	28,000	2,500
J. Woodburn, Castlemilk town, Lockerbie ...	60	65	44,023	2,562
H. Hamilton, Cleuchhead, Thornhill ...	32	40	19,839	720
Mrs M. Spence, Cowdens, Lockerbie ...	44	52	35,754	2,190
J. Y. Lethardy, Conrick, Sanquhar ...	24	28	14,956	1,770
The Directors, C.R.I. Farm, Dumfries ...	123	70	103,250	2,980
J. Mackie, Dalbible, Kirkmichael ...	82	80	56,802	5,840
M. Jamieson, Daltonhook, Lockerbie ...	50	39	25,160	1,000
D. G. Walker, Drumbuie, Sanquhar ...	43	45	25,058	2,000
J. Hendrie, Drum, Thornhill ...	57	34	32,124	2,800
W. Brown, Druncork, Thornhill ...	50	68	36,106	1,825
Messrs Weir, Drumruilton, Durisdeer ...	48	76	27,634	2,400
J. Mackie, Gomerigg, Kirkmichael (since July)	40	32	12,605	350
Messrs McKillop, Gibsons, Tundergarth ...	40	44	23,338	1,800
Messrs Halliday, Gilliesbierigg, Lockerbie ...	41	54	31,901	1,240
J. S. Laidlaw, Glengar, Penpont ...	34	44	17,639	1,472
Mrs Wallace, Goosehill, Sanquhar ...	22	20	18,570	200
J. Marshall, Green, Locharbriggs ...	28	31	16,240	365
Messrs Wyllie, Hannah, Cummertrees ...	69	52	50,992	2,000
A. Hunter, Holehouse, Durisdeer ...	35	22	13,200	1,000
M. Sloan, Hunterhouse, Lochmaben ...	30	45	23,400	2,000
J. Lamberton, Kirkeudbright, Moniaivo ...	26	10	16,895	4,242
Mrs V. T. Dickie, Knockonjig, Sanquhar ...	40	39	26,614½	760
N. Macmillan, Knowe, Kirkconnel ...	52	36	28,145	800
J. Johnstone, Millantae, Lockerbie ...	40	45	33,210	2,300
R. Daly, Muirfield, Lockerbie ...	16	10	11,000	400
Messrs Howie, Muirside, Dumfries... ..	90	133	55,600	7,670
J. Stevenson, Muirhill, Thornhill ...	34	40	17,380	840
Mrs Murray, Murraythwaite, Ecclefechan...	31	...	400	...
J. Harvey, Nether Keir, Auldgrith ...	33	28	19,514	1,000
J. Shanks, Nutholm, Lockerbie ...	35	32	28,031	1,500
A. Paterson, Paddockholo, Lockerbie ...	30	26	24,663	1,080
J. Mackie, Relief, Ecclefechan ...	90	29	53,157	2,920
J. Jamieson, Roundbush, Dornock ...	38	52	26,400	2,100
R. Millar, Shawsholm, Closeburn ...	74	54	45,495	3,400
H. Wilson, South Mains, Sanquhar ...	25	46	19,889	1,500
A. Yates, Upper Locharwoods, Ruthwell	25	24	17,142	3,650
D. D. Wyllie, No. 4 Woodhall, Dornock ...	15	8	7,899½	500
Total	2104	2018	1,366,992	88,423

	No. of Dairy Cows.	No. of Young Stock.	No. of Gallons Milk produced in 1936.	No. of Gallons fed to calves in 1936.
<i>(c) Standard Milk.</i>				
A. H. L. Walker, Rogermoor, Moffat ...	20	15	9,000	1,800
Total	20	15	9,000	1,800
<i>Dairies known to have tubercle-free herds but not yet licensed under the Order.</i>				
J. Gibson & Sons, Archwood, Lockerbie ...	39	39	23,977	270
W. Halliday, Goodhope, Johnstone ...	39	31	21,420	1,708
A. & R. Young, Redhills, Torthorwald ...	44	76	25,190	6,750
Wm. M'Kay, Swordwellrigg, Annan ...	25	22	5,676	400
J. Brown, Templand, Closeburn ...	32	45	21,480	400
Total	179	213	107,743	9,528
Grand Total	2303	2246	1,483,735	99,751

NUMBERS OF VISITS, SAMPLES, AND TESTS.

Class of Licence. Producers.						Milk Samples Examined.		Tuberculin Tests.							
Certified.	Tuberculin Tested.	Standard.	Pasteur- ised.	Retailers	Visits.	Bacterio- logical.	Chemical.	Herds One Test.	Herds Two Tests.	Routine Tub. Tests.	Interim Tub. Tests.	Graded.		Proposed Graded	
Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.	Filled.
1	47	1	1	8	496	99	277	32	16	5427	62	29	3460	107	187

Bacteriological.

Graded samples up to Certified standard	135
Graded samples up to Tuberculin tested standard	26
Graded samples under Tuberculin tested standard	23
—	184
Proposed graded samples up to Certified standard	11
Proposed graded samples up to Tuberculin tested standard	2
Proposed graded samples under Tuberculin tested standard	2
—	15
Total	199

Chemical : Butter Fat Content.

Conformed to Tuberculin tested standard (3·5%)	230
Did not conform to Tuberculin tested standard	47
<hr/>	
Total	277
<hr/>	

At the end of 1936 the holders of licences under this Order comprised 1 Certified, 47 Tuberculin tested, 1 Pasteurised, and 1 Standard milk.

Thirteen additional licences under the above Order were granted during the year. Six other herds are known to be free from tuberculosis. In addition, during the year 80 farmers have been submitting their herds to the Tuberculin test.

Twenty-nine more visits had to be made to graded herds than in the previous year.

All the official Tuberculin testing necessary under the Order, other than that done by the Veterinary Officers of the Department of Agriculture under the Attested Herds Scheme, was carried out by the County Veterinary Staff, the tests for this year being 475 more than in 1935. The results were as follows :—

No. of Herds.	No. of Reactors.
38	Nil.
3	1
3	2
1	4
1	5
1	6
1	7

As already stated, a large number of herds are gradually being cleaned up, and the number of herds licensed under this Order is steadily increasing. 20 herds licensed to produce Tuberculin tested milk are also attested under the Tuberculosis (Attested Herds) Scheme (Scotland), 1936.

*Difficulties militating against the successful marketing of
Certified and Tuberculin tested milk.*

As stated in previous reports, the unnecessarily high price charged in some places for these grades of milk is a great hindrance to the demand. If producers of the above grades received twopence per gallon over the price received for ordinary milk they would be compensated for extra outlay. Practically all the producers in the County agree that this is the case.

Many of the producers in this County are dissatisfied with the treatment they receive over the sale of Tuberculin tested milk. Some are paid the T.T. price for a larger proportion of the milk than others, even where the milk is being sent to the same Depot or Creamery. This is unfair and discouraging.

**U. PUBLIC HEALTH (MEAT) REGULATIONS
(SCOTLAND), 1930.**

There is need for a uniform system of meat inspection throughout the country.

The following slaughter-houses are under the supervision of the County Veterinary Staff:—

County—Thornhill	...	...	One Public Abattoir.
Thornhill	...	...	One Private Slaughter-house for Pigs at Bacon Factory.
Kirkeconnel	...	...	One Private Slaughter-house.
Templand	...	...	One Private Slaughter-house.
Kirkpatrick-Fleming	...	...	One Private Slaughter-house.
Racks	...	...	One Private Slaughter-house for Sheep.
Dornock	...	...	One Private Slaughter-house for Sheep.
Burghs—Sanquhar	...	...	One Public Slaughter-house.
Lochnaben	...	...	One Private Slaughter-house.
Lockerbie	...	...	One Public Slaughter-house.

**ANIMALS SLAUGHTERED AT THE ABOVE SLAUGHTER-HOUSES DURING
THE YEAR 1936.**

	Cattle.	Sheep.	Calves.	Pigs.
Thornhill Abattoir	511	1,008	296	104
Thornhill Bacon Factory	...	...	...	26,348
Kirkeconnel	145	339	154	113
Templand	470	1,042	412	936
Kirkpatrick-Fleming	104	156	20	4
Racks	...	51,000	...	...
Dornock	...	61,294	280	...
Sanquhar	345	854	93	5
Lochnaben	562	2,890	54	116
Lockerbie	617	49,268	532	175

MEAT INSPECTION BY COUNTY VETERINARY INSPECTORS.

Table showing weight of Carcases and Offal condemned in the different classes of animals slaughtered in the above slaughter-houses during 1936.

Bovines except Calves.										Sheep.						Calves.				Pigs.						
Carcases.	Quarters.	Meat—Lbs.	Heads.	Lungs.	Livers.	Other Offal.	Weight. Lbs.		Carcases.	Quarters.	Mutton—Lbs.	Livers.	Other Offal.	Weight. Lbs.		Carcases.	Plucks.	Weight. Lbs.		Carcases.	Pork—Lbs.	Heads.	Livers.	Other Offal.	Weight. Lbs.	
							Carcase.	Offal.						Carcase.	Offal.			Carcase.	Offal.						Carcase.	Offal.
50	36	1344	131	163	519	547	20570	15061	36	4	8	341	162	1704	1755	15	105	726	249	48	1132	2725	2196	3236	40461	15293

TABLE SHOWING AMOUNT OF CARCASE AND OFFAL CONDEMNED AT SAME
SLAUGHTER-HOUSES AND CAUSES OF CONDEMNATION.

Disease.	Bovines.		Sheep.		Calves.		Pigs.	
	Car- case.	Offal.	Car- case.	Offal.	Car- case.	Offal.	Car- case.	Offal.
Tuberculosis ...	11168	9556	380	100	...	...	35525	4452
Distomatosis ...	...	1286	4	1156	...	...	...	...
Cirrhosis ...	...	1204	...	104	...	...	60	1227
Imperfect Bleeding	330	130	1088	324	...	...	...	...
Abscesses ...	242	397	54	20	...	4	451	24
Septic Metritis ...	985	190	...	...	...	...	...	...
Emaciation ...	675	190	93	24	...	...	...	...
Pneumonia & Pleurisy	2032	453	15	14	237	42	234	2396
Bruises and Injury ...	1424	398	...	...	40	6	1414	42
Dropsy, Fever, and Tumours ...	2066	533	...	...	122	139	1095	59
Putrefactions ...	...	186	...	...	...	4	600	25
Mastitis ...	178	160	...	...	...	...	...	...
Tainted ...	730	...	...	...	120	9	...	...
Degeneration ...	...	70	...	...	...	...	...	294
Angioma ...	...	70	...	...	...	...	...	...
Actinomycosis ...	570	180	...	...	...	...	...	...
Johne's Disease ...	100	48	...	...	...	...	...	...
Parasitic ...	...	10	...	1	...	...	...	1093
Atrophy ...	70	...	...	...	...	...	...	...
Inflammation ...	...	...	70	12	51	9	...	...
Immaturity ...	...	...	...	...	102	6	60	9
Jaundice ...	...	...	...	...	54	...	...	...
Malnutrition ...	...	...	...	...	...	30	...	...
Pericarditis ...	...	...	...	...	...	...	83	5059
Pyæmia ...	...	...	...	...	...	...	32	...
Petechial ...	...	...	...	...	...	...	132	202
Molanosis ...	...	...	...	...	...	...	...	3
Measles ...	...	...	...	...	...	...	18	...
Crystic ...	...	...	...	...	...	...	3	392
Erysipelas ...	...	...	...	...	...	...	385	30
Scour ...	...	...	...	...	...	...	56	...
Fatty Infiltration ...	...	...	...	...	...	...	...	6
Congestion ...	...	...	...	...	...	...	...	9
Decomposition ...	...	...	...	...	...	...	300	20
Pigmentation ...	...	...	...	...	...	...	10	...
Fibrosis ...	...	...	...	...	...	...	...	482
Adhesions ...	...	...	...	...	...	...	...	3
Arthritis ...	...	...	...	...	...	...	4	...
Total weight in lbs.	20570	15061	1704	1755	726	249	40461	15293

Visits were made to Langholm private slaughter-house and Moffat public slaughter-house only when cases were reported by the Local Government Officer, or Burgh Surveyor of these places, for the purpose of examining any carcasses which have been detained.

Six hundred and fifty-seven visits were made to slaughter-houses for meat inspection, and thirty-two visits were necessary to inspect carcasses slaughtered under emergency. In most of the slaughter-houses the business is conducted in a satisfactory manner, but in a few a lot remains to be desired.

At Thornhill public abattoir and bacon factory, and also at Lockerbie public slaughter-house, the work has been carried out thoroughly and the meat detention work has been all that could be desired. As pointed out in previous reports, more concentration of slaughter in these centres might be considered ; failing that, at other slaughter-houses where it is impossible to have permanent Detention Officers meat inspection could be greatly facilitated by having limitation of days and hours for slaughter. No great inconvenience to the trade would be caused.

I am happy to acknowledge the excellent services rendered by Mr A. Gibb, Junior County Veterinary Officer, and by the Office Staff.

At all times the greatest help and most willing co-operation has been given by the members of Staff of the Bacteriological and Chemical Laboratories.

I am, Gentlemen,

Your obedient Servant,

GEO. A. SANGSTER,

County Veterinary Officer

Report upon Public Assistance Work for Year 1936.

During the year ended 31st December, 1936, the number of persons from whom applications for public assistance were received showed a decrease of 15 from the previous year, while the number of cases admitted by the committee to the Roll of Poor was 12 more than in 1935. There were 13 persons less in receipt of relief at 31st December, 1936, than there were at the corresponding date in 1935. A reduction of 39 in the numbers of Destitute Able-bodied Unemployed is shown, and is no doubt due to increased prosperity and the Agricultural Unemployment Insurance Act. The ordinary poor (outdoor) have increased by 24 and the indoor poor by 14. The number of boarded-out children has been reduced by 4 and the lunatic poor by 8. Since my first report on public assistance work the ordinary poor figures have increased from 350 persons at 31st December, 1931, to 499 persons at 31st December, 1936. The primary causes of this increase are the effects of new legislation, requiring that parts of certain forms of income must be disregarded, and increased scales of relief whereby persons are admitted to the roll who formerly would have been considered ineligible.

The transfer of the Destitute Able-bodied Unemployed to the Unemployment Assistance Board has been still further delayed, but is expected to take place at 1st April, 1937.

The following tables contain details of the number and manner of disposal of applications for public assistance during 1936, and of the number of poor chargeable to the County at the end of the year :

APPLICATIONS FOR RELIEF.

Number of Applications for Public Assistance.

District No.	No. of Applications	With-drawn by Applicant.	Re-fused by Committee	Relief offered not accepted.	Granted Relief.			
					Out-door.	In-door.	Institutional Lunacy Cases, etc.	Total Relieved.
1	141	...	3	3	118	13	4	135
2	81	2	4	1	52	17	5	74
3	218	2	7	3	185	17	4	206
4	132	1	14	3	104	8	2	114
5	108	1	...	3	98	5	1	104
6	73	2	2	3	60	6	...	66
7	28	...	...	...	23	5	...	28
8	44	2	1	...	38	2	1	41
...	6	...	...	...	...	2	4	6
Total	831	10	31	16	678	75	21	774
Total for year 1935	846	10	47	27	663	72	27	762

NUMBER OF REGISTERED POOR CHARGEABLE TO COUNTY.

Classification.	At 31st December, 1936.			At 31st December, 1935.		
	Poor Persons	Depend-ants.	Total	Poor Persons	Depend-ants.	Total.
Ordinary—Outdoor	499	539	1038	475	542	1017
Do. Indoor	61	...	61	47	1	48
Boarded-out						
Children ...	87	...	87	91	...	91
Lunatic and Mental						
Defective ...	159	...	159	167	...	167
Able-bodied						
Unemployed ...	88	198	286	127	315	442
Totals ...	894	737	1631	907	858	1765

SUSPENSE POOR.

At the end of the year 40 cases were chargeable on the roll of suspense poor. In 32 of these the settlement was still undetermined, the remainder being without any available settlement in Scotland.

LUNATIC POOR AND MENTAL DEFECTIVES.

The following are the details of numbers of this class of poor chargeable at 31st December, 1936 :—

	In Institutions.	Boarded-out.	Totals.
Lunatic Poor	130	6	136
Mental Defectives	18	5	23
Totals	148	11	159
Totals as at 31st December, 1935	155	12	167

On the instruction of the Public Health and Public Assistance Committee a communication was addressed to the Directors of the Crichton Royal Institution asking them to consider as to the practicability of arrangements for treatment of mental defectives in their institution. The matter is still under consideration.

VAGRANTS.

The number of vagrants dealt with and relieved during 1936 was 8773 as compared with 9480 in 1935, 10,337 in 1934, and 11,117 in 1933.

CLAIMS FROM OTHER AUTHORITIES.

Of 235 claims received from Other Authorities, 205 were finally admitted, 21 refused, and 9 were still under consideration at the end of the year pending investigation being made.

CLAIMS AGAINST OTHER AUTHORITIES.

Claims were made against Other Authorities in respect of 114 poor persons becoming chargeable in this County, and of that number 73 were successful, 2 refused, 2 withdrawn, and 37 remained in dispute at the end of the year.

ROWANTREE HOUSE.

The number of inmates at 31st December, 1936, was 28 males, 17 females, and 1 child (under the age of 2 years).

Further improvements have been carried out at the institution since last report. New water-closets and wash-up places have been provided, and the male bath-room has been extended and another bath installed. A bathroom has also been provided for the use of the maids. The washing-house has been renovated and new boilers installed. The cooking and heating arrangements have been greatly improved. The gardens and grounds are in splendid order and, along with the firewood industry, keep the male inmates fairly well employed. The gift of a wireless set to the institution last Christmas and the provision of several sets of games are greatly appreciated by the inmates.

SICKHOUSES.

No alteration in the number or manner of utilising those was made during the year.

PROSECUTIONS.

During the year warrants were applied for under Section 80 of the Poor Law (Scotland) Act, 1845, for the apprehension of 3 husbands who were neglecting to maintain their wives and children. In one instance the husband was sent to prison for six weeks. The other two cases were continued for sentence by the Sheriff, and the husbands were finally admonished on their implementing their obligations.

Seven cases were brought before the Sheriff for defrauding the Authority of various sums by wilfully neglecting to reveal relevant information as to their household income. In six instances fines or terms of imprisonment were imposed by the Sheriff. Sentence in the remaining case was deferred and was not disposed of at the end of the year.

REMOVALS TO ENGLAND.

During the year warrants for removal to England were obtained in two cases. Only one case, however,

was removed to England under warrant, the other case ceasing to be chargeable before removal could be carried out.

REPAYMENTS OF ALIMENT.

The sum recovered from relatives of poor persons, workmen's compensation, pensions, unemployment benefit, etc., amounted to £936 12s 3d, which shows an increase of £57 4s 7d over last year.

CHILDREN AND YOUNG PERSONS ACTS.

The following table shows the number of cases dealt with in terms of the above Acts. The Local Government Officers in their capacity of Infant Life Protection Visitors paid 124 visits of inspection in these cases :—

CHILDREN ACTS, 1908-1932.

Dist. No.	No. of Cases. 1st Jan., 1936.	Intimations Received.	Deaths.	Removals, etc.	No. of Cases. 31st Dec., 1936.
1	6	...	...	4	2
2	4	1	...	1	4
3	11	1	...	6	6
4	11	...	...	1	10
5	7	1	..	1	7
6	2	1	...	1	2
7	...	...	...	...	...
8	1	2	...	1	2
Totals	42	6	...	15	33
Previ- ous Year	40	14	...	12	42

VACCINATION DEFAULTERS.

The number of defaulters reported by Registrars and Other Authorities was 57, as per the undernoted table, which indicates the manner in which they were disposed of. Orders to vaccinate were issued to the Medical Officers in 28 cases :

District No.	Successfully Vaccinated.	Certified Insuperceptible	Certificates of Postponement.	Certified Not Traced.	Reported to Other Authorities.	Died before Vaccination.	Still Unvaccinated	TOTAL.
1	6	5	3	1	1	...	...	16
2	...	1	...	...	...	...	1	2
3	1	...	...	...	...	...	...	1
4	4	...	3	1	...	...	...	8
5	3	...	2	..	2	1	...	8
6	2	...	1	...	...	...	...	3
7	10	1	2	...	4	...	...	17
8	1	...	1	...	...	...	...	2
	27	7	12	2	7	1	1	57

UNEMPLOYMENT ASSISTANCE.

The Agency arrangements for the administration under Part Two of the Unemployment Assistance Act undertaken by this Department continued until the 20th June, 1936, when the work was taken over by the Boards permanent officials at their Area Office in Dumfries Burgh. At the date of the transfer 1155 cases had been registered in the County from 7th January, 1935, when the Act came into operation. The Board at the "take-over" appointed to their staff four of the Junior Clerks from the District Offices of the Local Government Officers, and one official from Head Office. The vacancies in the Local Government Offices caused by these appointments have since been filled, but it was considered unnecessary to fill the vacancy at Head Office.

APPLICATIONS FOR RELIEF FROM PAYMENT OF RATES.

The services of the staff of the Public Assistance Department were again utilised for the investigation of circumstances of persons who had applied for relief from rates. The number of cases in which reports were obtained and recommendations furnished for the guidance of the appropriate committee was 308.

CHANGES OF MEDICAL STAFF.—APPOINTMENTS.

Dr Geo. Ross Taylor—Temporary Poor Law Medical Officer of Cummertrees, Dalton, Mouswald, and Ruthwell.

Dr Mungo Bryson—Temporary Poor Law Medical Officer of Keir.

Dr David Murray—Temporary Poor Law Medical Officer of Penpont.

Dr R. A. M. Davidson—Temporary Poor Law Medical Officer of Tynron and Dunscore.

Dr Donald S. Campbell—Temporary Poor Law Medical Officer of Lochmaben and Kirkmichael.

OTHER SANITARY WORK.

A report on disposal of refuse throughout the County was prepared with a view to considering whether certain sites could be selected as central tips to which all refuse might be removed by motor transport. For various reasons a scheme covering the whole County was judged impracticable meantime, but it was remitted to a Sub-committee to consider whether a scheme for the Thornhill District might not be evolved. A suitable site for a central dump was visited by the Sub-committee, who were favourably impressed by its possibilities, but no further advance had been made at the end of the year.

The matter is one of some urgency, as the existing tip at Thornhill is overfull, and the need of scavenging arrangements at Moniaive and Penpont has long been clamant.

SMALL BURGHS.

BURGH OF ANNAN.

The following is an extract from the Annual Report by Mr Jas. I. Rodger, Sanitary Inspector for the Burgh of Annan :—

Water Supply.—The Local Authority, alive to the fact that this item is one of the prime essentials governing a state of good sanitary conditions existing in the Burgh, give it considerable attention, and whenever found advisable rectify any defects, whether they are minor or major.

Annan is the proud possessor of a good catchment area, coupled with an excellent impounding reservoir, wherein lies the basis of a healthy and clean community, owing to the fact that an unrestricted supply of water is available at all times, even during dry seasons when other communities are feeling the want of a good, wholesome supply of water.

The water is led into the town by gravitation, firstly from the impounding reservoir to the filter beds by the means of two mains 7" and 5" in dimension. The water is filtered at this point and stored in a clear water tank, from which it is gravitated into the town. Up to this year the water was conveyed into the town by a single 7" C.I. water main, but during the year a duplicate main similar in size was laid entering the town at the highest district, and since this has been installed a considerable increase of pressure has been experienced, although the new main in the meantime is being fed from the existing 7" main at a point immediately below the supply tank. When this new main is carried into the tank direct a further heightening of pressure is assured. At the present time the water entering the filter beds is regulated by a series of valves, and a constant watch has to be kept on

this, especially at night, to eliminate the water running to waste through the overflow outlets. To remedy this it has been arranged to install ball taps on the inlets to the filter beds and clear water tank and so regulate the flow of water. Included in this contract a meter house has to be erected, containing two meters, so that an exact record of the water consumed daily can be obtained and wastage easily detected. The stop ends, which are also numerous throughout the Burgh, are also being given attention, and where practicable these are being connected to form circuits. When the whole works are completed a high standard of water supply should be available for the uses of the community.

The distribution mains throughout the town are scoured at regular periods, and the filter beds are cleaned out at intervals to ensure of an even and wholesome supply being available at all times.

Drainage System.—During the year no serious flooding was experienced, although it was found necessary to open up a portion of the main drain and clear it of heavy matter, where it had a tendency to lie in a mass. This occurred at a portion of the main where little fall is available, and special attention has to be given this part to assure of a properly functioning drainage system.

Sewage Purification and Disposal.—Annan stands on the banks of the River Annan, which is of a good flowing nature, and, being so, the crude sewage is discharged into the current of the river, where it is broken up and carried to the Solway Firth. During the year the outlet pipes were extended and carried further into the river. This was deemed advisable as a preventative against any crude sewage finding its way to the adjacent banks and lodging there.

Offensive Trades.—Within the Burgh there is only one trade which comes under this heading, namely, a skin works. I am pleased to say that no complaints have been made against this business, and on numerous

inspections it has been found to be kept in a good, cleanly condition.

Housing.—Under this heading arises an item which gives every Local Authority food for considerable thought.

In this era it is essential that the former haphazard methods of housing be abolished and a systematic method of re-housing be developed and continued until the whole community is housed under conditions in keeping with an efficient standard of public hygiene, which should be the aim of all Local Authorities. With a view to keeping in line with such progress the following developments have been carried out by the Local Authority, and I herewith detail under numerous heads the progress of development as arrived at during the past years :—

UNINHABITABLE HOUSES.

At the year ending 31st December, 1936, the number of houses brought under the notice of the Local Authority was 132. The proprietors of these various properties were notified and undertakings signed by them agreeing that once the present tenants are removed the houses will not be re-let until such time that work has been executed on the properties, bringing them into a state of repair so that they are pronounced habitable and in a fit state to be used as dwelling-houses. Up to the present time, of the 132 properties involved 45 are closed or uninhabitable. 13 have been repaired, and in 74 the tenants are still waiting for removal to better accommodation. An extension of this list is now being proceeded with by the Medical Officer of Health, and will be dealt with at an early date.

HOUSING DEVELOPMENT.

Under the various Housing Acts since 1930 the Local Authority have authorised the construction of 40 houses, which have been completed. The scheme is composed of 8 four-apartment houses and 32 three-apartment houses. There are also under construction at present 68 houses, forming a scheme of 8 five-apartment houses, 36 four-

apartment houses, and 24 three-apartment houses. When these have been completed this will make a grand total of 108 houses available for re-housing. The Local Authority are also contemplating further building schemes, and with this in view are at the present time negotiating for the acquisition of appropriate sites.

RURAL WORKERS (SCOTLAND) ACT, 1926-1931.

Under this Act advantage has been taken by several proprietors, and up to the end of this year applications numbering 27 have been received, and in 26 cases the work has been completed and the houses repaired to compare with present day facilities.

Slaughter-house.—The killing in Annan is carried out in a public slaughter-house which comes directly under the supervision of the Local Authority. All animals slaughtered in these premises are checked and examined, and condemned whenever necessary. The number of animals slaughtered during the year was as follows :—

Cattle	.....	.....	.....	.....	611
Sheep	.....	.....	.....	.....	2425
Pigs	.....	.....	.....	.....	1004
Calves	.....	.....	.....	.....	20

During the year the following animals, or parts of animals, were condemned, seized, and destroyed under the warrant of a magistrate :—

Cattle	.....	.....	.....	.....	3
Sheep	.....	.....	.....	.....	12
Cattle Livers	.....	.....	.....	.....	39
Pigs	.....	.....	.....	.....	5
Calves	.....	.....	.....	.....	3
Sheep Plucks	.....	.....	.....	.....	51

Repairs were carried out on the buildings during the year. One portion where the brickwork was found to be settling was razed to the ground, the foundations strengthened, and the part rebuilt. The yard was also relaid

with concrete. Attention was also given to the lighting arrangement, and the Local Authority have sanctioned the renewal of the system, which work is being carried out by the local gas works.

Scavenging.—Employed on the collection of refuse of the Burgh are two carts, one of modern construction, being a low loading type fitted with balloon tyres. The refuse is collected in the main street daily, and in the other streets in the Burgh three times per week. Paper is also collected from the shops on Monday and Wednesday afternoons. The Council during the year sanctioned the erection of a one cell refuse incinerator, which is now in commission. The refuse is taken to the incinerator and there separated, all combustible material being burned. The tins and bottles, for which so far a market has not yet been found, are taken to the old coup, where they are deposited and covered with soil.

All the streets of the town are swept daily, and the cesspools are cleaned out at regular intervals.

The amount of refuse collected throughout the Burgh during the year ended 31st December, 1936, was as follows :—

Loads of Household Refuse	2170
Loads of Paper from Shops	161
Loads of Surplus Material ..	33
	<hr/>
Total	2364
	<hr/>

It will be seen from the foregoing figures that there is a steady increase each year of the amount of refuse to be dealt with. In my opinion there is a large amount of this refuse of a combustible nature, and such that it could be burned by the ratepayers themselves and by doing so lessen the cost of disposal, thereby aiding in the reduction of local rates.

Sanitary Conveniences, etc. — Since the scheme for re-housing the tenants from slum properties has been put into operation a steady decrease in the number of outside

water supplies and w.c. accommodation has been noticed. In Annan the existing number of dwelling-houses without inside water supplies and w.c. accommodation is as follows :—

(1) Houses without water supply and sink inside—

Outside taps supplying 1 tenant ..	21
Outside taps supplying 2 tenants ...	7
Outside taps supplying 3 tenants ..	1
Outside taps supplying 4 tenants ...	2
Outside taps supplying 5 tenants ...	1

(2) Water-closets used in common—

Outside w.c. for use of 2 tenants ..	74
Outside w.c. for use of 3 tenants ..	23
Outside w.c. for use of 4 tenants ..	4
Outside w.c. for use of 5 tenants ...	1

When the Local Authority's housing schemes have been completed this will considerably diminish the above figures, as included in the above data are the houses which come under the notice of the Town Council for closing purposes, and by the transference of the present occupiers to more suitable accommodation the houses will automatically be closed or renovated by the inclusion of inside water supplies and w.c. accommodation.

Schools.—Within the Burgh there are three schools, and when inspected are always found to be well looked after and kept in a cleanly condition.

Burial Grounds.—There are in existence in the Burgh three burial grounds, but during the year no interments have been carried out. They are all well looked after, and no complaint can be found with the way in which they are kept.

Workshops and Factories.—Within the Burgh there are numerous factories and workshops, and on periodic inspections I am pleased to say they are all looked after and kept in a cleanly condition. There has been no cause to take action against any of these places.

BURGH OF SANQUHAR.

Water Supply.—A considerable reduction of consumpt was noted during the year. This is presumably due to the greater care now being taken to prevent waste. The average consumpt in the first quarter was approximately 132,000 gallons ; during the last quarter it had fallen to an average of 117,000 gallons. Even the latter seems unduly high for a population of less than 2000, and it must be remembered that the erection of new houses with modern sanitary fittings will increase the demand for water.

Sewage Disposal.—The works have functioned in a satisfactory manner during the year.

Housing.—Visits to 119 houses under the Housing Acts were made during the year. Representations for Closing Orders were made in respect of three houses, while representations for Demolition Orders were made in respect of 22 houses. 1 Demolition Order was issued, the remainder being held over.

Twenty-seven tenants found to be overcrowded have been re-housed during the year.

Proposals for reconstruction of four unfit houses were put forward by the proprietors, but they have not yet been considered satisfactory.

Applications for the use of three Category III. houses as stores were made, only one being approved.

Bathroom accommodation provided in four dwelling-houses ; 1 house, 1 shop, 1 children's shelter, and conveniences at playing fields erected ; w.c. and wash-hand basin accommodation provided at a garage ; increased bedroom and bathroom accommodation provided at a hotel ; and urinal and w.c. accommodation provided at another hotel ; former house and shop reconstructed to form shop only. 27 new houses were completed during the year.

Slaughter-house. — Nothing requiring comment arose during the year.

Common Lodging-house.—Nothing requiring comment arose during the year.

Other Sanitary Work.—Visits were made in connection with five complaints received. In three cases there appeared to be no cause for complaint, while the other two cases dealt with housing matters which are being given attention in the housing programme.

Serious flooding occurred on High Street at Leven Road, and was apparently due to the grids at the mouths of the Corse and Kirksyke Burns becoming choked with debris washed down when the burns were in spate. This was reported upon, and the Town Council agreed to take the matter up with the proprietors on whose ground the overflow took place.

BURGH OF LOCHMABEN.

Water Supply.—Nothing requiring special comment arose during the year. When the Lower Nithsdale and Mid-Annandale water supply system is completed Lochmaben will remain as a small enclave, with a population of about 1000 persons, responsible for their own water supply. This appears unavoidable under existing conditions, but should any question of enlargement or alteration of the burgh supply ever arise it will present a problem for the careful consideration of both the Burghal and the County Authority.

Sewage Disposal.—The works have functioned well during the year, and no complaints have been received.

Housing.—The arrangement (referred to in the previous annual report) whereby a definite proportion of a sanitary inspector's time would be given to work in the Burgh having been made, the survey of houses in terms of the Housing (Scotland) Act, 1935, was commenced on 29th May, 1936. Friday of each week was devoted principally to the measurement, etc., of houses, and at the end of the

year housing cards had been prepared in respect of 276 houses, of which 165 were considered Category I., 44 Category II., and 67 Category III. At the time of inspection 25 houses were found to be overcrowded, of which number 7 occurred in Category I. houses, 5 in Category II. houses, and 13 in Category III. houses. (Decrowding took place during the year in 3 houses in Category III. without any action on the part of the Local Authority, and these are not included.)

During the year Demolition Orders were made in respect of 5 houses, and Closing Orders in respect of 2 houses.

Six houses were reconstructed by means of grants made under the Housing (Rural Workers) Acts.

Municipal housing schemes have sometimes been subjected to adverse criticism from an æsthetic standpoint. The Town Council of Lochmaben and their architect are to be congratulated on their attempt to introduce some variety in their schemes.

Other Sanitary Work.—Nothing calling for special comment occurred during the year.

BURGH OF LOCKERBIE.

The following is an extract from the Annual Report by Mr David R. Walker, Sanitary Inspector for the Burgh of Lockerbie :—

Water Supply.—The water supply for the Burgh is derived from an upland gathering ground of approximately 650 acres. It is an excellent catchment area, being free from peat, cultivated land, farm yards, and human habitations, which are always sources of contamination. The water is free from organic acids and has no deleterious effects on pipes.

The burn which is the main feed to the reservoir, small as it is, gives a very steady flow, and I believe I am correct in saying has never been known to go completely dry. This I attribute to the fact that there a number of springs discharging into the burn at various points. It is also observed that even when the burn is very low and the consumpt is much greater than the inflow the reservoir falls very slowly, which again is more than likely due to springs in the bed of the reservoir, and although this is only a matter of conjecture it is the most logical conclusion one can come to. The most exasperating loss during drought periods is experienced by the loss in evaporation from the surface of the reservoir, which is calculated at as much as 81,300 gallons in the 24 hours.

The reservoir itself, which has a capacity of $15\frac{1}{4}$ million gallons, is an excellent piece of work, and although present day engineers may pick faults in some of the minor details, I think we should congratulate ourselves in possessing such a fine reservoir, the credit of which must go to the promoters and designers who looked after our interest of fifty years ago. In my annual report last year I made reference to the advantages and disadvantages of large capacity reservoirs, and will not reiterate them again now, suffice to say that the advantages far outweigh the disadvantages.

Filter Beds.—The two filter beds, which are situated at Mainhill about 170 feet above the centre of the town, are of the slow sand filtration type; and although many towns have adopted mechanical filters now, I still hold that the slow sand filters, apart from being less costly to maintain, give a much better quality of water, due to the fact that the water is exposed to the rays of the sun and is being thoroughly oxygenated before distribution to the consumer in the town.

Storage Tanks.—The storage tanks, two in number, have a total capacity of 240,000 gallons, or equal to about two days' supply.

Trunk Main.—From the reservoir at Bankshill to the filter beds at Mainshill, a distance of about four miles, runs our all important trunk main. This pipe, which is of the cast-iron spigot and faucet pattern, is 7 inch in diameter, and the original gravity discharge at the filter beds was approximately 190,000 gallons in the 24 hours. The output at the present day is about 160,000, or 30,000 less in the 24 hours. This can only be expected, as the incrustation, little as it is, on the inside of the pipe is gradually setting up a resistance and slowly but surely lessening the inflow while the town is steadily growing, with the consequent increase in consumpt. This brings us to a very important question and which is of vital importance to Lockerbie, namely, the carrying capacity of the trunk main. The discharge of a 7-inch pipe (short outlet) running with a low head is approximately 597,600 gallons in the 24 hours, which is much more than three times the delivery of the trunk main; but of course the resistance on a long stretch of pipe over undulating country is very considerable. It follows that if these reducing factors could be overcome the flow would be greatly increased, and present day engineering comes to our aid and gives us what is now known as the "Booster," which is a pumping station introduced on the main at a point where the pressure is seriously fading, and increases same and consequently the flow.

Manchester city was faced with the problem of duplicating one of their mains at an expenditure of £800,000, but this was avoided by laying down a Booster Station. This simple and inexpensive method of augmenting the carrying capacity of a main, thus saving the expense of duplicating it, deserves to be better known.

Distribution.—The distribution throughout the town during the year has been satisfactory. I am of opinion, however, that we have arrived at a period when there should be a tightening up in regard to supplies other than domestic and trade supplies, which should all be through meter and special charges. Not only would this con-

siderably conserve our supply, but it would be a source of revenue to the water account and would allow for much needed improvements being carried out, and, after all, would only be conforming with the Water Clauses Act of 1863, Section 12.

Sewage Disposal.—The sewage works, although well away from the town, unfortunately are not placed in what one might say an ideal position, owing to the fact that we depend on a small inland burn for the dilution of the effluent. In controlling the works one feels that they are more or less at the mercy of the burn water to keep down any complaints, for should it run dry, or nearly so, during mid-summer, when the peak period of our most troublesome trade waste is reached, namely, the creamery discharge, then one is given an almost impossible task.

Many experiments have been tried with a view to improving the works, some of which have been found wanting and discarded. Others have been found most helpful. Amongst those have been the storing of rain water in the disused settling tank for flushing purposes when the burn is low. the sluice dams in the burn for scouring purposes, and the seeding of the filters with *Achorutes viaticus*, a tiny purple-black insect which has a voracious appetite for sludge, the study of the habits of which is most interesting.

An improvement effected during the summer was the extension of the effluent drain from the works to the other side of the Dumfries railway, which to a great extent keeps down any disagreeable odour on the public road.

Drainage.—The whole town is provided with sewers, and the drainage of all houses is connected to same. There are no privies or dry-closets. The sewers are all of sufficient gradient and dimensions as to work satisfactorily without any additional flushing.

The number of water-closets serving more than one tenant, and houses without water and sinks inside the house, are as follows :—

Common water-closets serving 2 tenants	10
Common water-closets serving 3 tenants	2
Common water-closets serving 4 tenants	1

Houses without water and sinks inside the house number 20.

Cleansing.—The scavenging of the streets is efficiently carried out in the usual manner.

Refuse Collection.—Refuse is collected three days per week and is let to a local contractor, who carries out the work in a satisfactory manner with horse and cart. The adoption of motor transport has recently been under consideration by the Town Council, but after being fully considered it was thought advisable to make no change in the meantime.

Refuse Depot.—The refuse depot is in close proximity to the town, and since the development of new houses in that area I consider that in the interests of public health it would be advisable to shift further afield at an early date when other and more suitable land can be procured.

The approximate tonnage of refuse handled during the year is as follows :—

Household Refuse	1240 tons.
Waste Paper	140 tons.
Other Sources	125 tons.
<hr/>	
Total	1505 tons.
<hr/>	

Slaughter-houses.—The Burgh slaughter-houses are well situated, and are of good design and construction. Run in conjunction with the Burgh slaughter-house is a

private business carried on in separate premises for the slaughtering of lambs for the London markets. This business is steadily increasing year by year, until it can now be regarded as a growing industry in the district.

The following are the comparative figures for the slaughtering of animals for the years 1935 and 1936 :—

	1935.	1936.	Increase.	Decrease.
Bulls .....				..
Oxen	529	543	14	...
Cows	54	61	7	..
Heifers ..	8	18	10	..
Calves ...	581	527	.....	54
Sheep	47,831	50,056	2225	
Pigs	183	172		11
	<hr/>	<hr/>	<hr/>	<hr/>
	49,186	51,377	2256	65
	<hr/>	<hr/>	<hr/>	<hr/>
An increase of		2,191		

It will be observed from the above figures that the large increase is in the slaughtering of sheep, which is entirely due to the killing for the Smithfield Markets (London). For the past three years the slaughtering for this business has increased by 13,877.

It will be readily understood that the quantity of garbage from such a large amount of slaughtering is considerable, and I may say that the disposal of same is a troublesome business and is always a vexatious problem to the Public Health Department. At present it is being carted by the Local Authority to a farm about a mile from the town and disposed of for manure.

Schools. — Lockerbie Academy is the only school situated within the Burgh. The sanitary fittings are all of good design and satisfactory.

Dairies. — There are two registered dairies situated within the Burgh which are inspected regularly. They are of good construction and kept in a clean state.

Factories and Workshops.—There are no factories, and the workshops within the Burgh number 25, all of which may be regarded as satisfactory.

Common Lodging-house. — There is one small common lodging-house situated within the Burgh, which is kept clean and well conducted and meets the needs of the district.

Burial Grounds.—There is one burial ground within the Burgh which is now under the control of the Local Authority. During the year three interments were carried out, and although the graveyard is closed there are still several claims to rights of burial. I repeat my remarks of last year's report, that it would be better closed entirely.

Bakehouses. — There are five bakehouses situated within the Burgh and of satisfactory construction, and on inspections during the year were found to be in a satisfactory condition.

Nuisances.—The nuisances that occurred during the year were all looked into and abated without any proceedings having to be taken.

There were ten notices of intimation served, all of which were complied with.

Housing (Scotland) Acts, 1930 and 1935. — The following is a resumé under the above Housing Acts:—

The total number of houses surveyed under Table 1 as per form " B " return, December, 1935, equals		712
Deduct families (Sub-lets) included in above		9
		<hr/> 703
Unfit houses closed during 1936—		
Empty houses	4	
Families removed from district	1	
Unfit overcrowded re-housed	17	
Unfit re-housed	22	
	—	44
		<hr/> 659
Overcrowded families in fit houses re-housed ...	12	
To Kintail Park	9	
Decanted to Leonard Terrace	1	
Left the district	2	
	—	12
		<hr/>
Additional houses provided—Kintail Park Scheme, 1936		46
		<hr/> 705
Houses measured and surveyed under Table 2 of 1935 Act		606
		<hr/>
Balance still to be dealt with		99
		<hr/>

The 606 houses surveyed are in the following
Categories :—

Category 1—186 fit houses, eleven of which are over-
overcrowded.

2—295 unfit, but can be made fit at reasonable
cost.

3— 78 unfit, but can not be made fit at reason-
able cost.

The position at the end of 1936 in regard to housing requirements is as follows :—

Families requiring one apartment	.....	10
Families requiring two apartments	... ..	nil
Families requiring three apartments	..	14
Families requiring four apartments	..	18
Families requiring five apartments	..	6
Families requiring six apartments	.....	1
		—
		49
There is a surplus of 2 apartments which can be used for re-housing one-apartment families	.....	6
		—
		43
		—

The foregoing details relate to properties that have been dealt with by the Medical Officer of Health and myself ; but under the survey there still remains a further 78 houses listed in Category 3 awaiting inspection, and there is every likelihood that provision will require to be made for these also. There are 295 houses in Category 2, many of which are not seriously short of the standard, but the greater number will require considerable reconditioning.

BURGH OF MOFFAT.

The following is an extract from the Annual Report by Mr John Sanson, Sanitary Inspector for the Burgh of Moffat :—

Water Supply.—The water supply is derived from springs on the lands of the Granton Estate, and continues to be of ample quality for the needs of the Burgh. Close observations are kept on the springs and storage tanks throughout the year, and at no time has there been any cause for anxiety, as the volume from the several springs never varies. No filtration is necessary. The catch-

ment area is wholly hill pasture and well removed from any likely source of contamination. The storage tank serving the Burgh has a holding capacity of 28,000 gallons, and the daily average consumpt for all purposes during the year has been 236,000 gallons, as compared with 235,800 gallons per day during the year ended 31st December, 1935. This includes water supplied to a large number of dwelling-houses, farms, and a garage outside the Burgh boundaries.

Housing.—The housing survey mentioned in the report for year ending 31st December, 1935, has now been completed, and the Town Council have resolved to erect sixteen houses at their Rogermoor site for the purpose of relieving overcrowding in the Burgh.

Housing (Rural Workers) Acts, 1926 and 1931.

Applications for assistance in aid of reconstruction and improvement of houses	1
Number of applications which were approved and assistance granted	1

Five houses in Henderson Street have been demolished by the Town Council, and the site is being cleared and retained as an open space.

Common W.C.'s.

Serving four tenants	1
Serving two tenants	4
Houses without water and sink inside house	1
Privy middens	nil.
Ashpits	nil.

Sewerage and Sewage Works.—Further improvements have been made to the town sewers with a view to reducing the amount of subsoil water entering the works, with the result that the effluent being discharged into the River Annan has been highly satisfactory throughout the year.

No complaints have been received, and every effort is made to maintain the works in an efficient manner so that the very best results may be obtained.

The daily average flow from the works during the year has been 253,000 gallons, this being a decrease of 41,300 gallons per day compared with the previous year, and an increase of 14,300 gallons per day in excess of the daily average water consumpt.

Cleansing.—As mentioned in a previous report, the cleansing of the Burgh is carried out by the Burgh workmen. The Town Council have purchased a piece of waste land outside the Burgh boundary, and this is used as a dump. The quantity of household refuse and street sweepings removed daily average 4 tons per day: it is laid down in layers, and whenever possible a top dressing of road scrapings are spread on.

Nuisances.—Seventeen complaints were received during the year, none of which were of a serious nature and were readily attended to when brought to the notice of those responsible.

Slaughter-house.—The public slaughter-house continues to be maintained in a satisfactory manner. The premises are under the control of the Town Council and are kept clean and wholesome. Offal and manure are removed daily; regular inspections are made by the meat inspector and detention officer.

The animals slaughtered during the year numbered, viz. :—

		1936.	1935.
Cattle	.....	77	161
Sheep	..	429	706
Pigs	..	33	50

The decrease in the number of animals slaughtered is due to two of the butchers who previously used the Moffat slaughter-house now having their slaughtering done elsewhere.

Schools.—Twelve visits of inspection were made to the schools in the Burgh, and in each case the premises were found to be well maintained.

Factories and Workshops.—In the supervision of the workshops in the Burgh one hundred and twenty-seven visits of inspection were made. They were found to be well kept, and in no case was it found necessary to serve a written notice for a breach of the Act.

Bakehouses.—There are four bakehouses within the Burgh, all of which are in good order.

Dairies.—There is one milkshop in the Burgh, to which numerous visits have been made. On each occasion the premises were found to be in a satisfactory condition.

Common Lodging-houses.—There is no common lodging-house in the Burgh. There is a rest house where vagrants are given shelter for one night, the premises being under the control of the County Council of Dumfries. It is well conducted and kept scrupulously clean.

Burial Grounds.—The burial ground in the burgh is under the control of the Town Council, and it is kept in good order.

BURGH OF LANGHOLM.

The following is an extract from the Annual Report by Mr A. A. Oliver, Sanitary Inspector for the Burgh of Langholm :—

Water Supply.—There have been no alterations in connection with the water supply. This service has been properly maintained, and the town has been supplied with an abundant quantity of pure water throughout the whole year.

The springs and gathering ground were inspected and found to be in a thoroughly wholesome condition at the dates of visits. Every reasonable precaution has been taken to prevent contamination of the supply.

The work of waste prevention, upkeep of pipes, fittings, etc., has been carried out by the Burgh Surveyor's department in a proper and efficient manner.

Drainage and Sewage Purification.—The drainage and sewerage system is in proper working order and has satisfactorily fulfilled its function without giving rise to any nuisances or complaints. The usual routine work of dragging and maintenance has been carefully carried out.

The main sewer was extended in connection with the second development of West Street Housing Scheme.

All connections to mains, and all other new drainage works, were inspected and tested before being put into use.

The work of sewage disposal has been greatly improved by the installation of an electric air-extracting plant at a cost of about £100. Previously the vacuum tank used for removing sludge was exhausted by a hand operated air-extractor which gave only very moderate results at a great expenditure of time and labour. The new power plant is performing the work with efficiency and dispatch, with the result that the tanks are in much better working order and the final effluent considerably improved.

The sludge is finally disposed of as formerly by removal to the refuse coup, where it is immediately covered with fulzie.

There have been no complaints regarding nuisances arising out of the work of sewage disposal.

Scavenging and Cleansing.—The work of the cleansing department has been carried out as in former years, and reasonable results have been obtained.

I regret to report that there are still many cases of carelessness regarding the putting out and taking in of dustbins and waste-paper. In many cases the refuse is put out the night before the collection, thereby encouraging vermin and causing litter in the streets. This practice is a serious breach of good citizenship, and I would recommend that the Local Authority take immediate steps to deal with the offenders.

Street cleansing has received considerable attention and care, but I am still of opinion that the time devoted is insufficient, and consider that in order to obtain first-

class results it is necessary to allocate more of the time of the Burgh staff to this important work.

The refuse coup at Wauchope Caul became exhausted during the year, and pending the acquisition of an alternative site the town's refuse was used for making up the river bank at Kilngreen. The work was carried out carefully, and represents a very fine example of the excellent results that can be obtained by the exercise of care and organisation. At both Wauchope Caul and the Kilngreen every effort was made to reduce the number of rats and other vermin. Traps, poison, and cyanogas were used regularly with good results, and the numbers of vermin have been kept within practical limits.

The Town Council have had considerable difficulty in procuring land for a new refuse dump. Several sites were prospected, and at present arrangements are practically completed for the lease of a piece of land at High Mill Bridge. The site, situated about a mile from the town, is ideal for the purpose, and I have no doubt, bearing in mind the results obtained at the Kilngreen, that the question of refuse disposal will be satisfactorily solved.

Nuisances.—Several complaints regarding nuisances were received and investigated. These were chiefly relating to minor matters, and were remedied on verbal notice being given to the persons responsible. In no case was it found necessary to serve a notice or ask the Local Authority to take statutory proceedings.

There are no closets on the conservaney system, earth-closets, or privies within the Burgh. The number of water-closets serving more than one tenant and houses without water and sinks inside the house are as follows :—

Common water-closet serving 2 tenants	...	...	55
Common water-closet serving 3 tenants	...	..	16
Common water-closet serving 4 tenants	..	...	5
Common water-closet serving 5 tenants	..	...	1

In the following cases (included in the above) the provision of a separate water-closet was considered to be either impracticable or inexpedient :—

Common water-closet serving 2 tenants	15
Common water-closet serving 3 tenants	3
Common water-closet serving 4 tenants	1
Houses without water and sinks inside the house	8
Ash-pits serving one house only	5

Slaughter-houses.—The three private booths licensed by the Local Authority were inspected regularly and found to be in a satisfactory condition at the dates of visit.

The following carcases were inspected—236 oxen, 693 sheep, 41 pigs.

In three cases it was found necessary to detain a carcase for inspection by the Meat Inspector. As a result of these inspections two bovine carcases affected with general Tuberculosis and one head affected with Actinomycosis were seized and destroyed.

Burial Grounds.—There are no burial grounds within the Burgh.

Factories and Workshops.—Forty-one inspections were carried out, and the premises visited were found to be in a satisfactory condition. In no case was it found necessary to serve a written notice for a breach of the Act.

Houses Let in Lodgings and Common Lodging-houses.—There are no houses let in lodgings or common lodging-houses within the Burgh.

Report for the year ended 31st December, 1936, on Proceedings taken with regard to the Inspection, Improvement, and Demolition and Closure of Dwelling-houses.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND), 1928.

1. Number of dwelling-houses inspected :—

(a) During year	806
(b) Since 1st January, 1931	806

2. Number of dwelling-houses which on inspection were considered to be in any respect unfit for human habitation :—

(a) During the year	51
(b) Since 1st January, 1931	76

BURGH POLICE (SCOTLAND) ACT, 1892.

3. Number of houses in respect of which notice was given during the year under Section 246 requiring provision of a sufficient water-closet	nil.
4. Number of houses where requirements were complied with by owners during year	nil.
5. Number of houses where works carried out by Town Council during year after failure to owners to do so	nil.
6. Number of houses for which water-closets were provided during year at instance of Town Council without formal notice under Section 246	nil.
7. Number of houses in respect of which notice was given during year under Section 246 requiring provision of inside water supply and sink	2
8. Number of houses in which requirements were complied with by owners during year	nil.
9. Number of houses in which works carried out by Town Council during year after failure of owners to do so	nil.
10. Number of houses in which inside water supply and sink were provided during year at instance of Town Council without formal notice under Section 246	nil.

HOUSING (SCOTLAND) ACT, 1925.

11. Number of houses of (a) one apartment, and (b) two apartments, for erection of which consent of Town Council was given during year in terms of Section one hundred and eleven :—	
(a)	nil.
(b)	nil.

HOUSING (SCOTLAND) ACT, 1930.

- | | | |
|--|-------|------|
| 12. Number of dwelling-houses in respect of which notices were served during year under Section 14 (1) | ..... | nil. |
| 13. Number of dwelling-houses rendered fit for human habitation during year following on notices under Section 14 (1) | ..... | nil. |
| 14. Number of dwelling-houses in respect of which work has been done during year by Town Council under Section 15 (1) | ..... | nil. |
| 15. Number of dwelling-houses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted during year for a notice under Section 14 (1) | .. | nil. |
| 16. Number of dwelling-houses in respect of which notices were served during year in terms of Section 16 (1) | ..... | 15 |
| 17. Number of dwelling-houses in respect of which, following notice under Section 16 (1) :— | | |
| (a) Undertaking has been given during year that house will not be used for human habitation until it has been rendered so fit | ..... | 15 |
| (b) Undertaking has been given during year that house will be rendered fit | ..... | nil. |
| (c) Demolition orders have been made during year under Section 16 (3) | ..... | nil. |
| (d) Closing orders have been made under Section 16 (3) and (4) | ..... | nil. |
| 18. Number of dwelling-houses rendered fit during year following on undertakings under Section 16 (2) | ..... | nil. |
| 19. Number of dwelling-houses rendered fit for human habitation during year at instance of Town Council without formal notice under Housing (Scotland) Act, 1930 | ..... | nil. |

20. Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by Town Council during year following upon houses having been rendered fit for human habitation nil.
21. Number of houses in respect of which advances have been made during year in terms of Section 34 towards cost of repairs and amount so advanced nil.

Out of the total of 51 houses unfit for human habitation 21 are already closed, 4 are occupied by people of advanced age and will be closed when they become vacant, and 1 is occupied occasionally as a summer residence.

The chief defect found is dampness and lack of light and ventilation in attic rooms.

The detailed survey of houses for the purposes of the Housing (Scotland) Act, 1935, is practically complete, and the statistics relative to overcrowding will be available early in the new year.

LABORATORY REPORTS.

A. CHEMICAL LABORATORY.

The Laboratory meets the administrative requirements of the Counties of Dumfries, Kirkcudbright, and Wigtown, and the Burghs therein. Analyses and other examinations are made for the Local Authorities and for approved institutions and individuals within the area, but the bulk of the work submitted is on behalf of the County Councils. It consists principally of the examination of water and sewage; of milk, in connection with the Milk (Special Designations) Order (Scotland); and of foods and drugs taken for the enforcement of the Food and Drugs (Adulteration) Act and its associated Orders.

The remainder includes the examination of fertilisers and feeding stuffs, and of medicines for the several National Health Insurance Committees, together with occasional problems of diverse nature which call for special treatment.

ANALYSES MADE FOR THE COUNTY COUNCILS.

(a) Dumfriesshire.

Eight hundred and sixty samples were submitted, representing 63 per cent. of the total number received in the Laboratory.

Work for the Public Health Department has continued on the lines just indicated.

WATER—POTABLE.

(a) Special Water District Supplies.

Examination is made of the water from the Special Water Districts each quarter, and half-yearly from Lockerbie Burgh Supply. The actual analyses are given in Appendix 1.

The supply to Sanquhar Burgh was also examined, particular regard being had to the efficiency of the filters.

A large number of samples were examined with particular reference to the amount of lead taken up by water which had been allowed to remain in the service

pipes overnight. The amount present was generally well below the usually accepted safety limit; but in some samples, where abnormal conditions imposed an unusually severe test, the amount present exceeded this limit.

On 4 occasions the presence of undue amounts of suspended matter was noted. It consisted of mineral and vegetable particles together with various Diatoms and Algæ.

Though relatively harmless in itself, this suspended matter detracts from the appearance of any domestic supply and may give rise to complaints. Where the water is filtered the remedy is simple, but with unfiltered supplies the cure for the most part must be left to natural agencies.

(b) Other Samples.

The customary routine investigation of proposed new supplies, or of complaints regarding those presently in use, involved the examination of 141 samples. Several were rather unusual, and in 8 instances the usual sanitary analysis was supplemented by an examination of the saline residue.

In conjunction with these, seventeen other analyses (14 partial) were made of saline residues obtained from samples drawn from neighbouring wells, in an endeavour to ascertain whether the abnormal amounts of 2 constituents (Potassium and Nitrates) present in several samples were common to the area.

The amounts of Potassium compounds present in these abnormal samples varied from 1.5 to 2.77 parts of Potassium (K) per 100,000, and are far in excess of the .05 to .2 parts per 100,000 found in several of the Special Water District Supplies.

Similarly, nearly 3 parts of Nitrogen in the form of Nitrate were present in some samples. That present in the Special Water District supplies rarely exceeds .3 part, and is usually much less. This problem is still receiving attention, and further data are gradually being collected.

A partial examination sufficed in 10 instances where the objects were either to ascertain the nature of the

particles in suspension, or to determine the amount of metallic contamination—Lead, Copper, or Zinc. They presented no unusual features.

WATER—RIVER.

Three series of samples were collected from the burn running alongside the path leading from the Edinburgh Road to the River Nith at Nunfield Golf Course. This burn receives the effluent from one or more cesspools. The analytical results showed that the natural self-purifying power of this water is adequate to deal with present discharges, but that with any substantial increase in the latter the burn would speedily afford visible evidence of pollution.

The examination of 2 series of samples taken at various points between Lockerbie Sewage Disposal Works and the River Annan showed that at the time of sampling the condition of the Turnmuir Burn was not satisfactory, a state of affairs due mainly to the presence of large volumes of creamery waste.

Two samples taken from the burn near Heathhall Works, above and below the point of entry of a cesspool effluent, were satisfactory. They contained an abundant supply of Dissolved Oxygen and consisted of "clean" water as defined by the Royal Commission on Sewage Disposal.

SEWAGE AND SEWAGE EFFLUENT.

Eleven samples were received during the year.

One effluent from Thornhill was stable and well nitrified, although the Biochemical Oxygen Demand exceeded the usual standard of 2 parts per 100,000. Another taken in June was highly concentrated and showed a high Biochemical Oxygen Demand. This effluent had a distinct reddish brown colour due to the presence of slaughter-house waste.

These highly concentrated wastes produce occasional temporary overloading of the filters, but owing to the dilution afforded by the Nith there appears to be little

risk of nuisance arising, unless perhaps after a long spell of dry weather.

Effluent from Moniaive, although well nitrified, had an excessive Biochemical Oxygen Demand, and the figure for Oxygen Absorbed from Potassium Permanganate was high. Again, the dilution from the Dalwhat Water seemed adequate.

Two effluents from Loehmaben were stable and well nitrified. Comparison with Tank Liquor collected at the same time showed a very satisfactory degree of purification, but the Biochemical Oxygen Demand of the mixed effluent was higher than desirable in an effluent of this nature.

An effluent from Loekerbie Sewage Disposal Works submitted in February could be regarded as satisfactory. Two further samples taken in July and August contained excessive amounts of putrescible organic matter. It is to be regretted that the strenuous efforts made by the Local Authority to improve the condition of this effluent have not been more successful.

Effluent from the Sewage Disposal Works at Heath-hall, collected where it enters the River Nith, was unsatisfactory. Fortunately the total discharge is relatively small, and there is a very large volume of "clean" diluting water immediately available.

MILK.

In connection with the Milk (Special Designations) Order (Scotland), the County Veterinary Inspector submitted 281 samples of milk. 209 of these came from the herds of licensed producers, *i.e.*, consisted of Grade A, A.T.T., or Certified Milk. The examination was usually restricted to the determination of the Milk Fat Content. Results in the form of quarterly averages are given below, but in compiling the table 33 samples taken from individual cows and under special circumstances have been excluded. For comparative purposes the corresponding averages for samples received from the Stewartry and Wigtownshire are included, together with the data for

samples submitted under the Food and Drugs Act. The latter, when "not genuine" samples are excluded, afford a fair index of the Fat Content of ordinary milk.

Table No. 1.

Quarter.		Dfs.		Graded. Kbt.		Wig.		Food and Drugs. Dfs. Kbt. & Wig.	
		No.	Fat.	No.	Fat.	No.	Fat.	Fat.	Fat.
1 ...	...	54	3·96	17	3·80	13	4·14	3·60	3·61
2 ...	...	57	3·86	20	3·61	6	3·47	3·43	3·45
3 ...	...	44	3·97	20	3·78	14	4·21	3·67	3·62
4 ...	...	21	4·20	7	4·08	16	4·36	4·04	4·23
		176	3·96	64	3·77	49	4·15	3·64	3·76
Year.									
1935	...		3·90		3·89		3·72	3·60	3·52
1934	...		3·90		3·92			3·63	

There is a substantial rise in the mean percentage of Milk Fat for the year in the Wigtownshire samples, with a decrease in the corresponding figure for Kirkcudbright. The Dumfriesshire figures show little change.

Nineteen samples involving 13 herds (in a total of 44) contained less than 3·5 per cent. of Milk Fat—the minimum percentage fixed by the Milk (Special Designations) Order (Scotland), 1936. The figures ranged from 3·45–3·00 per cent., with a mean deficiency of ·3 per cent.

Thirty-three samples from individual cows were taken at a farm where "stripping" by hand followed milking by machine. They contained percentages of Milk Fat varying from 1·4 per cent. to 5·10 per cent., with an average of 3·41 per cent. These samples are referred to later (page 103).

Sixty-seven other samples contained on an average 3·87 per cent. Milk Fat, the extremes being 2·70 and 7·8 per cent.

A number of complaints were received regarding the keeping quality of some supplies, and in 16 cases "Acidity" determinations were made. In 13 of these the "Acidity" varied from 14·7° to 20° (*i.e.*, c.c.'s N. per Litre), or expressed as Lactic Acid ·13 per cent. to ·18 per cent. The remaining 3 failed to comply with the requirements of the Scottish Milk Marketing Board, *i.e.*, "Acidity" not to exceed ·20 per cent. Lactic Acid, giving figures of ·21, ·22, and ·23 per cent. Lactic Acid respectively.

FOOD AND DRUGS.

The Inspector appointed under the Food and Drugs Act* submitted 150 samples. These are considered later together with similar samples from Kirkeudbrightshire and Wigtownshire.

* Joint Committee appointment.

MISCELLANEOUS.

A sample of ærated water was found to contain a small amount of lead; another contained undesirable suspended matter.

The Chief Constable submitted 2 fowls for toxicological examination. While the commoner poisons were absent, salt (though not in toxic amount) was found in one crop, and the greater part of a toxic dose was recovered from the other.

Table No. 2 shows the various samples examined on behalf of Dumfriesshire County Council.

Table No. 2.

PUBLIC HEALTH DEPARTMENT.

Water (1) Potable.

(a) S.W.D. Supplies	73
S.W.D. Supplies—Partial	152
(b) Others	144
Others—Partial	24
	<hr/> 393

(2) River	21
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Sewage and Sewage Effluent	11
-----------------------------------	----

Milk (Certified, A.T.T., and A.).

Mixed Milk	176
Individual Cows	33
Others	72
	<hr/> 281

Miscellaneous	2
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*Food and Drugs	150
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POLICE DEPARTMENT.

Fowls	2
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860

* Act administered by Joint Committee.

KIRKCUDBRIGHT COUNTY COUNCIL.

Of 30 samples of water examined for potability, 9 were reported as unsuitable and 3 of doubtful purity. Partial examination was made of 13 samples, in 9 instances

WIGTOWNSHIRE COUNTY COUNCIL.

Of 10 samples of Water examined for fitness for dietetic use, 1 was reported as unsuitable and 2 others of doubtful quality. 5 samples of Burn Water were examined with regard to their suitability for receiving a discharge of sewage effluent and with a view to establishing a standard for the effluent.

For the investigation of a case of alleged river pollution by waste liquors from a Creamery I visited the Creamery and inspected various streams in its neighbourhood, in company with the County Medical Officer and the County Sanitary Inspector. It was considered desirable to take 6 samples of water and 1 of waste liquor.

The latter, though relatively weak for liquors of this nature, had a polluting effect at least six times as great as that of an equal volume of "strong" domestic sewage. In two samples of water the Biochemical Oxygen Demand was higher than desirable for good quality river water.

Two others containing Waste Liquor were grossly polluted, while the remaining samples taken nearly $1\frac{1}{2}$ miles below the place of discharge of the Waste Liquor still afforded evidence of pollution. Even there the stream had an objectionable odour.

Fifty-two samples of Milk taken under the Milk (Special Designations) Order (Scotland) were considered with those taken in Dumfriesshire and Kirkeudbrightshire.

One hundred and sixteen samples of Food and Drugs submitted by the Sanitary Inspectors for the County and for the Burgh of Stranraer are considered with the other Food and Drugs samples.

One formal sample of Fertiliser and one of Feeding Stuff were received from the Official Sampler. In both cases the composition of the sample was found to be in accordance with the Statutory Statement.

Table No. 4 shows the various samples received from Wigtownshire County Council.

Table No. 4.

Water.									
(1) Potable	...	...	...	...	...	...	...	10	
(2) River	...	...	...	...	...	...	...	11	
								—	21
Sewage and Sewage Effluent	...	...	...	...	...	...	...	...	1
Milk.									
(a) Certified and A.T.T.	...	...	...	...	...	...	...	49	
(b) Others	...	...	...	...	...	...	...	3	
								—	52
Food and Drugs	...	...	...	...	...	...	...	...	116
Fertilisers and Feeding Stuffs	...	...	...	...	...	...	...	...	2
									192

FOOD AND DRUGS (ADULTERATION) ACT.

Three hundred and eighty-seven samples in all were submitted by the Joint Committee of Dumfriesshire and the County Councils of Kirkcudbrightshire and Wigtownshire. Particulars of these are shown in Appendix 2.

Details of 33 samples (8·5 per cent.) certified as "not genuine" are given in Table No. 5.

Table No. 5.

Milk.

DUMFRIESSHIRE.

Sample No.

708	2·87	8·89	11·76	·72		Def. Fat 4%
755	3·12	7·43	10·55	·64	·485° C.	Added water 12%
769	2·63	8·60	11·23	·76		Def. Fat 12%
775	2·37	8·97	11·34	·73		Def. Fat 21%
777	2·23	5·78	8·01	·54	·367° C.	Def. Fat 25%
						added water 32%
778	3·05	7·03	10·08	·69	·474° C.	Added water 17%
785	3·49	7·98	11·47	·68	·491° C.	Added water 6%
786	2·87	8·91	11·78	·75	·544° C.	Def. Fat 4%
792	2·09	5·30	7·39	·45	·324° C.	Def. Fat 30%
						added water 37%
*776	3·50	7·55	11·05	·66		Added water 11%

KIRKCUDBRIGHTSHIRE.

130	2·82	4·79	7·61	·48	·290° C.	Def. Fat 6%, added water 43%
131	2·94	6·95	9·89	·63	·436° C.	Def. Fat 2%, added water 18%
132	3·14	6·80	9·94	·63	·452° C.	Added water 20%
*A1	2·70	4·55	7·25	·50	·282° C.	Def. Fat 10%, added water 41%

WIGTOWNSHIRE.

27	3·21	6·23	9·44	·52	·40° C.	Added water 26%
*1A	2·35	8·67	11·02	·75	(A.T.T.)	Def. Fat 32%
*3A	3·15	8·71	11·86	·70	(A.T.T.)	Def. Fat 10%
*5A	2·90	8·78	11·68	·74		Def. Fat 17%

Mince and Sausage Meat.

DUMFRIESSHIRE.		Sulphite Preservative equivalent to Sulphur Dioxide. Parts per million.			
Sample No.					
697	Mince	...	...	...	135
818	Mince	...	...	...	520
825	Mince	...	...	...	330
826	Mince	...	...	...	270
*690	Mince	...	...	...	340
*817	Mince	...	...	...	380
*819	Mince	...	...	...	96
*823	Mince	...	...	...	360
*824	Mince	...	...	...	200
KIRKCUDBRIGHTSHIRE.					
55	Mince	...	...	...	500
127	Sausage Meat	...	...	...	800
WIGTOWNSHIRE.					
*40	Mince	...	...	...	140
*29	Mince	...	...	...	380
*43	Mince	...	...	...	40

Other Samples.

WIGTOWNSHIRE.		
18	Butter.	Excess of Water 2.29%

* Informal Samples.

Successful proceedings were instituted in 9 cases involving Milk, and proceedings were pending in respect of another sample at the end of the year under review.

Reference has been made previously to 33 samples of Milk from individual cows taken from the herd of a producer holding an A.T.T. licence. Milk from this farm had been purchased in the usual manner by the Inspector, and had been certified to be deficient in Fat to the extent of 21 per cent. or thereby.

Subsequent investigations made jointly by the producer and the County Veterinary Inspector showed that the deficiency was due to the absence of a proper proportion of the "strippings" from the milk first despatched for retail sale. This milk had been obtained by machine milking, which at that time was followed by hand "stripping." The latter has since been abandoned and cows now being milked entirely by machine. Subsequent samples have been satisfactory. Largely as a result of these investigations, only a modified penalty was imposed when the case was heard.

In several instances the addition of large amounts of water (in one case 2 parts of water to 3 of milk) had been made to milk consigned to creameries. Milk is usually bulked almost immediately it is received, so that the detection of watering is possible only if samples are drawn directly from the churns prior to bulking.

It should be well known now that facilities for the examination of milk are available—and are used—at every creamery, and that in consequence successful wholesale “watering” over any length of time is manifestly impossible.

Pleas of guilty were tendered in 5 cases where Mince or Sausage Meat containing preservative had been sold contrary to the Preservatives in Food Regulations (Scotland).

In another case the charge was not pressed, for technical reasons. As usual, charges were generally based on Section (1), *i.e.*, of selling an article “... rendered injurious to health...” and for which most severe penalties may be imposed.

Butter No. 18 came from a farm supplying small quantities at irregular periods. Action in this case was limited to the issue of a warning.

NATIONAL HEALTH INSURANCE.

Twenty-one samples of Medicine received from the Insurance Committees consisted of 12 liquid and 9 solid medicaments, the last named including 3 ointments.

Generally, the analytical results indicated a high degree of accuracy in dispensing. The differences observed between the amounts prescribed and those found by analysis were usually within the limits laid down in the British Pharmacopœia for the standardisation of more potent preparations. In one instance, however, 63 grains of Potassium Iodide had been supplied in lieu of 80 prescribed; and in another, where 4 dr. of Sodium Bicarbonate had been prescribed, an excess of .46 dr. was present. This sample, when received, contained undissolved solids, and the excess was probably apparent rather than real,

since accurate sampling of such liquids is a matter of great difficulty.

MISCELLANEOUS ANALYSES.

In the following 8 instances a toxicological examination was requested.

A powder was found to consist of pure strychnine. It was contained in a bottle labelled Aspirin, and for which it had been mistaken, with fatal results.

Two powders, examined with reference to the death of a child, were found to be "stomach" powders dispensed in accordance with the requirements of the prescriptions.

Arsenic was detected in animal viscera, and further examination showed the presence of arsenic in sacks found in the same field as the deceased animal.

Portions of the viscera of a dog in an advanced state of decomposition (the carcass had been exhumed) contained strychnine, but none could be detected in a wood pigeon received at the same time.

A Feeding Stuff examined for the presence of Castor Seed and mineral poisons yielded entirely negative results.

Twenty-two samples of Water taken from the boilers at Lochmaben Sanatorium were examined to ensure that the chemical treatment applied to the feed water was maintaining the boiler water in a non-corrosive and non-incrusting condition. Alkalinity tests of the feed water were also made regularly by the boiler house staff.

The remaining 25 samples, examined on behalf of local firms or private individuals, consisted of:—

Water	16
Fertilisers	6
Milk	1
Ice Cream	1

together with a Bottle of Standard Alkali Solution sent in for verification.

They call for no particular comment.

JOHN W. HAWLEY.

District.	Quarter.	Total Solids.	Saline Residue.	Volatile Matter.	Chlorine (Cl).	Nitrates (N).	Nitrites (N).	Saline Ammonia.	Albuminoid Ammonia.	Oxygen absorbed in 4 hours.	Iron (Fe).	P ₁₇ Value.
Lower Annandale	...	...	...	...	...	...	...	...	...	...	...	...
	1	9.44	6.08	3.36	1.20	.032	Nil.	.0010	.0144	.300	.006	7.1
	1	9.04	6.24	2.80	1.20	.032	Nil.	.0008	.0050	.095	.003	7.3
	1	9.74	6.24	3.50	1.20	.032	Nil.	.0008	.0128	.276	.005	7.2
	2	9.92	6.32	3.60	1.20	.024	Nil.	.0008	.0096	.222	trace	7.1
	2	9.20	6.00	3.20	1.0	.008	Nil.	.0006	.0108	.091	.007	7.6
	2	9.60	6.16	3.44	1.20	.024	Nil.	.0010	.0116	.213	trace	7.3
	3	9.76	7.84	1.92	1.00	.032	Nil.	.0018	.0170	.437	.013	7.0
	3	8.32	7.28	1.04	.90	.016	Nil.	.0006	.0104	.66	.007	7.7
	3	9.52	7.84	1.68	1.00	.024	Nil.	.0012	.0128	.337	.009	7.0
Bankshill	4	9.92	7.12	2.80	1.10	.040	Nil.	.0034	.0164	.350	.003	7.3
	4	9.60	6.32	3.28	1.30	.032	Nil.	Nil.	.0082	.120	.002	7.4
	4	9.20	6.40	2.80	1.20	.016	Nil.	.0008	.0006	.325	.006	7.2
	1	20.64	17.76	2.88	1.10	.080	Nil.	trace	.0010	Nil.	.010	7.4
	2	20.56	16.56	4.00	1.20	.048	Nil.	Nil.	trace	.013	.020	7.3
	3	17.28	15.84	1.44	1.20	.088	Nil.	.0008	.0020	.024	.010	7.5
	4	15.44	11.60	3.84	1.00	.048	Nil.	.0008	.0008	.024	.010	7.4
	2	10.44	7.28	3.16	1.40	.417	Nil.	Nil.	.008	.005	.005	5.9
	3	11.20	6.32	4.88	1.4	.184	Doubtful reaction.	Nil.	trace	Nil.	.005	6.0
	4	5.24	3.48	1.36	1.50	.176	Nil.	.0008	.0024	Nil.	.003	6.2
Crawick	1	6.80	5.30	1.50	1.10	.016	Nil.	trace	.0034	.050	.003	7.1
	2	6.96	5.52	1.44	1.10	.004	Nil.	.0006	.0066	.120	.005	7.4
	3	6.80	6.16	.64	1.00	.024	Nil.	trace	.0044	.088	.005	7.1
	4	7.68	6.24	1.44	1.50	.016	Nil.	Nil.	.0038	.015	.005	7.2
Dumfries Landward	1	12.72	9.04	3.68	1.30	.184	Nil.	.0016	.0146	.316	.004	7.1
	2	11.10	8.16	2.94	1.20	.080	Nil.	.0010	.0080	.248	.010	6.9
	3	14.28	10.20	4.08	1.30	.016	Nil.	.0012	.0144	.274	.008	7.0
	4	11.52	9.24	2.28	1.20	.048	Nil.	.0012	.0190	.443	.007	7.0

District.	Quarter.	Total Solids.	Saline Residue.	Volatile Matter.	Chlorine (Cl.)	Nitrates (N)	Nitrites (N)	Saline Ammonia.	Albuminoid Ammonia.	Oxygen absorbed in 4 hours	Iron (Fe).	Ph Value.
Moniaive ... Do. ... Do. ... Do. ...	1	8.72	6.16	2.56	1.10	.024	Nil.	trace	.0040	.106	.004	7½
	2	11.04	8.64	2.40	1.20	.012	Nil.	.0024	.0210	.243	.030	7.1
	3	7.20	5.52	1.68	1.10	.008	Nil.	.0010	.0080	.203	.013	7.5
	4	8.88	6.32	2.56	1.50	.016	Nil.	.0006	.0054	.121	.005	7.2
Netherwood, Kelton, and Craigs Do. Do. Do.	1	14.56	10.96	3.60	1.40	.032	Nil.	.0006	.0036	.039	.003	7.6
	2	13.44	9.04	4.40	1.50	Nil.	Doubtful reaction	.0006	.0102	.067	.007	8.7
	3	16.64	15.76	.88	1.40	.008	Nil.	.0026	.0130	.092	.005	7.7
	4	15.36	11.36	4.00	1.40	.008	Nil.	trace	.0054	.074	.003	7.6
Penpont ... Do. ... Do. ... Do.	1	10.96	6.80	4.16	1.20	.040	Nil.	trace	.0020	Nil.	.017	6½
	2	8.64	6.72	1.92	1.3	.040	Nil.	Nil.	trace	Nil.	Nil.	6.5
	3	8.88	7.68	1.20	1.20	.040	Nil.	Nil.	trace	Nil.	.003	6.3
	4	8.48	6.08	2.40	1.40	.040	Nil.	Nil.	.0018	Nil.	.005	6.0
Ruthwell and Raffles Do. Do. Do.	1	11.04	6.34	4.80	1.80	.064	Nil.	.0014	.0066	.147	.004	6.9
	2	10.72	7.12	3.60	2.1	.032	Nil.	trace	.0038	.336	.005	7.2
	3	9.44	8.40	1.04	1.80	.040	Nil.	.0012	.0054	.108	.003	7.0
	4	9.28	6.32	2.96	1.50	.012	Nil.	.0010	.0100	.167	.005	7.1
Rowanburn Do. ... Do. ... Do.	1	12.64	9.04	3.60	1.20	.25	Nil.	trace	.0054	.149	.007	6.0
	2	11.36	6.88	4.48	1.20	.31	Nil.	trace	.0034	.028	.003	6.4
	3	15.84	9.92	5.92	1.10	.333	Nil.	.0010	.0072	.113	.007	6.6
	4	15.44	9.52	5.92	1.40	.33	Nil.	.0014	.0076	.172	.006	6.1
Thornhill ... Do. ... Do. ... Do.	1	9.52	7.04	2.48	1.20	.032	Nil.	Nil.	.0006	.006	.004	6.8
	2	10.96	8.56	2.40	1.1	.024	Nil.	Nil.	.0022	.022	.024	6.7
	3	4.56	2.80	1.76	1.20	.032	Nil.	.0006	.0024	.066	.003	6.6
	4	10.24	7.92	2.32	1.30	.056	Doubtful reaction.	.0010	.0020	Nil.	.016	6.6

Appendix 2.

Table showing the Number and Nature of Samples received under the Food and Drugs Act.

Article.	County Councils of			Total	Adulterated
	Dfs.	Kbt.	Wig.		
Milk	73(10)	34(4)	30(4)	137	18
Milk (Ideal) ... ..	...	...	2	2	...
Cream (Tinned)	1	...	1	2	...
Butter	13	7	15(1)	35	1
Margarine ... ..	...	13	6	19	...
Lard	9	1	4	14	...
Cheese	2	...	2	4	...
Tea ... ..	...	13	4	17	...
Coffee	7	...	...	7	...
Cocoa	1	3	2	6	...
Barley ... ..	...	3	1	4	...
Cream of Tartar	3	11	5	19	...
Baking Soda	1	4	1	6	...
Pepper ... ..	...	5	3	8	...
Ginger	3	2	1	6	...
Cinnamon	2	1	...	3	...
Mustard	1	...	1	2	...
Ground Rice ... ..	...	...	1	1	...
Sugar ... ..	...	1	1	2	...
Mince	16(9)	4(1)	6(3)	26	13
Mincemeat ... ..	...	1	...	1	...
Sausages ... ..	...	4	7	11	...
Sausage Meat ... ..	...	2(1)	...	2	1
Paste ... ..	...	...	1	1	...
Honey ... ..	...	...	2	2	...
Whisky ... ..	...	12	2	14	...
Rum ... ..	...	...	1	1	...
Soda Water	1	...	...	1	...
Fruit Wine—					
Raspberry	1	...	...	1	...
Black Currant	1	...	...	1	...
Strawberry	1	...	...	1	...
Ginger Wine	1	...	...	1	...
Corn Flour ... ..	...	...	1	1	...
Oatmeal ... ..	...	...	1	1	...
Semolina ... ..	...	...	1	1	...
Green Peas (Tinned) ... ..	...	...	1	1	...
Chicken Soup ... ..	...	...	1	1	...
Red Currant Jelly ... ..	...	...	1	1	...
Pineapple ... ..	...	...	1	1	...
Pilchards ... ..	...	...	1	1	...
Glace Cherries ... ..	...	...	1	1	...
Brisket of Pork ... ..	...	...	1	1	...
Milk of Magnesia ... ..	...	...	1	1	...
Liquorice Powder	4	...	...	4	...
Cascara Segrada ... ..	...	...	1	1	...
Epsom Salts	2	...	...	2	...
Gregory's Powder	2	...	...	2	...
Seidlitz Powder	4	...	...	4	...
Olive Oil	1	...	1	2	...
Carron Oil ... ..	...	...	1	1	...
Eucalyptus Oil ... ..	...	...	1	1	...
Camphorated Oil ... ..	...	...	1	1	...
Glycerine ... ..	...	...	1	1	...
Total	150(19)	121(6)	116(8)	387	33

	Water.	Sewage and Sewage Effluent.	Food and Drugs.	Milk.	Fertilisers and Feeding Stuffs.	Medicines.	Miscel- laneous.	Total.
Dumfries County Council ...	414	11	150	281	...	...	4	860 (1251)
Kirkeudbright County Council	43	...	121	71	...	...	1	236 (262)
Wigtownshire County Council	21	1	116	52	2	...	...	192 (174)
Dumfries County Insurance Committee.	...	...	...	...	...	6	...	6 (6)
Dumfries and Maxwelltown Insurance Committee.	...	...	...	...	...	4	...	4 (4)
Kirkeudbrightshire Insurance Committee.	...	...	...	...	...	7	...	7 (7)
Wigtownshire Insurance Committee.	...	...	...	...	...	4	...	4 (4)
Other Local Authority ...	26	...	...	1	...	...	3	30 (15)
Private ...	12	...	...	...	...	...	13	25 (53)
Total ...	516	12	387	405	2	21	21	1364 (1776)
	(901)	(7)	(324)	(498)	(2)	(21)	(23)	

A. BACTERIOLOGICAL LABORATORY.

County Health Office,
County Buildings, Dumfries,
4th August, 1937.

To The County Medical Officer,
County Buildings, Dumfries.

Sir,

I beg to submit my report for the Bacteriological work performed in this laboratory during 1936.

During the twelve months ending 31st December, 6494 bacteriological examinations were made, being an increase of 52 on the figure for the previous year.

For the purpose of comparing the figures of examinations made during 1936 and 1935 the following data are given :—

	1936.	1935.	Increase or Decrease.	
Swabs for Diphtheria	2599	2164	435	.....
Sputa	330	331	.....	1
Widals	117	167	.....	50
Blood Culture	12	17	.....	5
Blood Examinations	167	162	5	.....
Cerebro-Spinal Fluid	39	29	10	.....
Fæces	33	38	.....	5
Urines	145	229	.....	84
Pus and Pathological Fluids	79	46	33	.....
Miscellaneous	58	72	.....	14
Wassermann	317	381	.....	64
Gonococci	277	295	.....	18
Milk	1417	1668	.....	251
Water	325	375	.....	50
Cows' Sputa	347	297	50	.....
Anthrax	218	154	64	.....
Vaccines	14	17	.....	3
Total	6494	6442	597	545

Swabs for Diphtheria.—These have been taken for the purpose of diagnosis, of determining the length of treatment, and of detecting carriers. They are not a true index of the amount of Diphtheria present in the area, as in some cases it is necessary to take six or seven or even more swabs before reporting that the throat is free from *C. Diphtheriæ*. Variations may be expected from year to year. The year 1936 shows an increase of 435. The number of swabs taken in the County of Dumfriesshire shows a decrease of 236, having fallen from 1206 to 970. In the area outwith the County served by this laboratory the number of swabs submitted has risen from 958 to 1629.

Sputa are practically the same in number as last year. Of the total of 330, 301 were examinations for the tubercle bacillus, the remaining 29 being for the determination of the causal organism in respiratory disease.

Widal's reaction, i.e., agglutination tests for bacilli of the enteric group, has fallen from 167 to 117.

Venereal Diseases.—To help with the detection of this in suspected patients, 277 examinations were made for Gonococci, and 317 Wassermanns were done. The latter figure shows a definite decrease compared with 381 done last year.

Milk.—The examinations for Milk show a decrease. Of the 1417 examinations done, 1040 were done for the County Authorities and 377 for outside sources. The figures for last year were 1162 for the County Authorities and 506 for outside sources.

As regards Dumfriesshire, these Milks taken from various sources were subjected to examinations for (1) Bacterial Count, (2) Presence of tubercle bacillus, (3) Presence of other pathogenic organisms, *e.g.*, the causal organism of mastitis.

Examinations of Milk from the County of Dumfries for the tubercle bacillus numbered 407, of which 13 were positive. These figures are not necessarily an index of bovine tuberculosis, as animals which are obviously tuberculous from a clinical point of view are often taken under

the Tuberculosis Order without a bacteriological examination. The samples submitted are usually those in which there is an element of doubt.

Two hundred and seventy Milks were tested for organisms other than tubercle bacilli and 363 Milks for bacterial count. Separate tables showing details of bacterial count are given.

During the year under review the following bacteriological standards for graded milk were prescribed by the Scottish Department of Health :—

Certified.—The milk must not contain more than 30,000 organisms per c.c., or any *Bacillus Coli* in 1/10th of a c.c.

Grade A (Tuberculin Tested) and Grade A.—The milk must not contain more than 200,000 organisms per c.c., or any *Bacillus Coli* in 1/100th of a c.c.

Anthrax.—The total number of examinations done shows a decided increase, being 217 as compared with 154 last year. There were 10 positive results.

Cows' Sputa.—347 Cows' Sputa were examined, of which 212 were done for the County Authorities. Of this total of 212, 30 were positive.

Waters.—325 samples were examined, and of this number 31 were done for the Stewartry, 9 for Wigtownshire, and 9 for private individuals. The remaining 276 consisted of quarterly examinations of the supplies to the Special Water Districts, and of other waters used or intended for use as domestic supplies. A table has been drawn up showing the results of examinations of Special Water District Supplies, so far as the presence of Coliform bacilli is concerned.

A table has been drawn up showing the sources of pathological material and the material submitted.

EDWARD ARMSTRONG.

TABLE SHEWING SPECIMENS SUBMITTED AND
SOURCE OF SUPPLY.

			Dumfries County.	V. D. Clinic.	Dumfries Burgh.	Stewartry of Kirkcudbright.	Wigtown County.	Dumfries and Galloway Royal Infirmary.	Private	Total
Swabs (Diphtheria)	...	...	970	...	157	1113	346	13	...	2599
Sputa	...	...	111	...	112	75	31	1	...	350
Widals	...	...	55	...	16	15	7	24	...	117
Blood Cultures	...	...	7	...	1	1	...	3	...	12
Blood Examinations	...	...	52	...	23	10	3	45	34	167
Cerebro-Spinal Fluid	...	...	...	...	1	5	...	33	...	39
Fæces	...	...	14	...	13	2	3	1	...	33
Urines	...	...	44	...	64	11	3	4	19	145
Pus and Pathological Fluids	...	...	16	...	4	14	10	35	...	79
Miscellaneous	...	...	28	...	6	10	4	4	6	78
Wassermann	...	...	41	81	48	23	37	87	...	317
Gonococci	...	...	29	198	13	18	13	6	...	277
Milk	...	...	1040	...	1	160	161	..	55	1417
Water	...	...	276	...	...	31	9	...	9	325
Cows' Sputa	...	...	212	...	...	133	2	...	...	347
Anthrax	...	...	217	...	...	1	...	..	...	218
Vaccines	...	...	...	...	...	...	...	...	14	14
Total	...	...	3112	279	459	1622	629	256	137	6404

WATER SUPPLIES TO THE SPECIAL WATER DISTRICTS.

Smallest amount (in c.cs.) of Sample in which Coliform Bacilli
were detected.

— Indicate Coliform Bacilli absent from 100 c.cs.

Quarters.	I.	II.	III.	IV.
Lower Annandale ...	{ 100 c.cs.	{ 100 c.cs.	{ 10 c.cs.	{ 100 c.cs.
Bankshill ...	—	—	10 c.cs.	100 c.cs.
Blackshaw ...	Not done	—	—	—
Crawick... ...	—	100 c.cs.	100 c.cs.	—
Dumfries (Landward)	10 c.cs.	—	100 c.cs.	100 c.cs.
Eaglesfield ...	—	—	10 c.cs.	—
Ecclefechan ...	—	—	—	—
Glencaple ...	—	10 c.cs.	1 c.c.	100 c.cs.
Kirkconnel ...	{ 100 c.cs. 10 c.cs.	{ 10 c.cs. —	{ 10 c.cs. —	{ 1 c.c. —
Lockerbie Burgh ...	100 c.cs.	Not done	100 c.cs.	Not done
Moniaive ...	100 c.cs.	0·1 c.c.	100 c.cs.	100 c.cs.
Netherwood, Kelton, & Craigs ...	100 c.cs.	—	100 c.cs.	10 c.cs.
Penpont ...	—	—	—	—
Ruthwell and Raffles ...	100 c.cs.	—	100 c.cs.	100 c.cs.
Rowanburn ...	10 c.cs.	10 c.cs.	10 c.cs.	10 c.cs.
Thornhill ...	—	10 c.cs.	10 c.cs.	10 c.cs.

GRADED MILKS.

Microbes per c.c.	No. of Samples.	B. COLI.					
		Absent from 0.1 c.c.		Present in 0.1 c.c.		Present in 0.01 c.c.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.
Under 30,000	130	117	67.63	8	4.62	3	1.73
Over 30,000 and under 200,000	21	13	7.51	4	2.31	...	...
Over 200,000	22	5	2.90	5	2.90	4	2.31
Total	173	135	78.04	17	9.83	7	4.04
						14	8.09

NON-GRADED MILKS.

Microbes per c.c.	No. of Samples.	B. COLI.					
		Absent from 0.1 c.c.		Present in 0.1 c.c.		Present in 0.01 c.c.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.
Under 30,000	101	71	37.37	22	11.58	6	3.16
Over 30,000 and under 200,000	50	19	10.00	14	7.37	13	6.84
Over 200,000	39	7	3.68	9	4.74	10	5.26
Total	190	97	51.05	45	23.69	29	15.26
						19	10.00

REPORT

ON

MEDICAL INSPECTION.

Report on the Medical Inspection of School Children.

For the Year ending 31st July. 1937.

I.—List of Staff.

Chief School Medical Officer.

JOHN RITCHIE, M.B., Ch.B., M.R.C.P.E., D.P.H.

Assistant School Medical Officers.

E. B. MUNRO, O.B.E., M.B., Ch.B., D.P.H., Lieut.-Col.
I.M.S. (Retd.).

AGNES F. TURNER, M.B., Ch.B., D.P.H.

School Dentist.

AGNES J. DALZIEL, L.D.S.

Consulting Oculist.

JAMES A. ROSS, M.A., M.B., Ch.B., Carlisle.

II. (a).—Number of Schools.

The number of schools under medical inspection is 98.

(b).—Number of Children.

The average number on the roll was 13,020.

III.—Number of Routine Visits to Schools.

The number of routine visits to schools for systematic examination was 292.

IV.—Number of Special Visits.

(A whole day comprises two visits.)

For Examination of Errors of Refraction	14
For Examination for Infectious Disease	12
For Examination for Mental or Physical Defect	92
For Examination of Verminous Children, Absence from School, etc.	5
	<hr/>
	123
	<hr/>

V.—Sanitary Conditions of Schools.

A. LIGHTING.

The lighting is inadequate in all rooms at Nethermill School owing to trees in the playground, and in the senior room at Penpont.

Electric light is wanted in St. Andrew's Girls' School, at Applegarth, Ruthwell, and Sibbaldbie. The electric lighting is indifferent in the art room and technical block of Annan Academy.

B. VENTILATION.

There has been complaint of draught in the following schools:—Gilnockie, Glencaple, Gubhill, and Megdale.

Lochnaben has old-fashioned windows which do not open sufficiently.

Improvements have been carried out at Moniaive, which now has opening windows in all rooms; and at Sanquhar, where two classrooms have better ventilation.

C. HEATING.

Electric radiators have been supplied to a number of schools during the past year, and electricity is to be installed in several schools during the coming year for the purpose of heating as well as lighting. There still remain a number without electricity, depending on the open fire alone for purposes of heating, which is inadequate,

namely, Birleyhill, Breconbeds, Cogrieburn, Dunscore (infant room), Evan Water, Gair, Harlaw, Nethermill, Shieldhill, Sibbaldbie, Tynron Endowed, and Westerkirk. At Durisdeer the stove in the junior room has been replaced by an open fire with much benefit.

D. CLEANSING AND DISINFECTION.

The usual inside redecoration, outside painting, and white-washing of latrines has been carried out.

E. WATER SUPPLY.

There has been some water shortage at times during the year at Glenzier, Hoddam, Hutton, Johnstonebridge, Moniaive, St. Mungo, and Tundergarth; and complaints of discolouration of the water have come from teachers at Durisdeer, Gilnockie, Kirkconnel, Moniaive, and Mouswald.

There is at present no pipe supply in ten schools—Birleyhill, Burnhead, Craigmue, Dalton, Enterkinfoot, Keir, Glenzier, Steilston, Templand, and Trailtrow. With the exception of Birleyhill and Craigmue, all these schools will be affected by the new water scheme.

The supply has been augmented at Evan Water, Garrell, and Shieldhill; and a leak repaired at Upper Tynron.

F. SANITARY CONVENIENCES.

Water-closets have been installed at Evan Water and Mount Pleasant, and renovations or renewals carried out at St. Andrew's Girls', Maxwelltown, S. Michael's, St. Mungo, and Torthorwald.

There are still old-fashioned water-closets at Carron-bridge, St. Columba's, and Sanquhar Academy.

At Hutton the closets are not always efficiently flushed during the summer owing to water shortage.

The pails in the closets at Glenzier are emptied only once a week ; and at Templand the ash-pit is cleared once a year ; it is within a few feet of a classroom window.

Wash-hand Basins.—The schools that have no water laid on have inadequate cleansing arrangements, the children using or not using an enamel basin on a stand, and water which has to be carried in. At Birleyhill, Enterkinfoot, and Goodhope they lack even the enamel basin. Wash-hand basins have been supplied to Mount Pleasant School (1) and to St. Andrew's Girls' (4).

A playground fountain is required at Ruthwell.

Cloakroom accommodation is noted as being insufficient at Annan Academy (Greenknowe), Lochinaben, St. Michael's, Moniaive, Shieldhill, and Westerkirk ; at the latter school coats are being hung in the infant room.

G. PLAYGROUNDS.

Playground surfaces are mostly either rough, poorly drained, or not level ; and a goodly number are quite unsuited for physical exercises. A few are unfenced from the public road, namely, Amisfield, Garrel, Hutton, and Penpont. Two schools (Cairn and Templand) have no official playground, and are dependant on the courtesy of the farmer for the use of a piece of ground.

At Tundergarth and Wanlockhead a small part of the playground has been cemented.

A new shelter has been erected at Ruthwell.

A new playground has been provided for Mount Pleasant School, and Duncow has had the gift of a playing field.

H. DESKS.

At Hutton Hall some of the desks are unsuitable, causing the children to sit in an incorrect way.

VI.—Organisation and Administration.

A. SYSTEM OF MEDICAL EXAMINATION.

The Department of Health requires the examination of each pupil at least three times during school life :—

- (1) As soon as possible after admission to school —
“Entrants.”
- (2) During the intermediate stages (ages 9, 10, 11) —
“Intermediates.”
- (3) Towards the end of the elementary school period —
“Leavers.”

The instruction by the Department of Health, “That every school be examined twice yearly at reasonable intervals,” has been carried out.

B. SCHOOL NURSES.

The District Nurse or Health Visitors are present, as far as possible, at medical inspections.

C. ARRANGEMENTS FOR "FOLLOWING UP."

The table below gives details :—

Nursing Association.	Cases notified.	Cases visited.	Number of reports.
Annan	139	139	246
Lower Annandale	113	110	307
Canonbie	7	7	8
Cumberland	12	11	19
Dalton and Mouswald	26	26	61
Dunscore	21	21	28
Eskdale and Langholm	25	25	43
Glencairn	2	2	3
Hoddam	14	14	41
Kirkconnel	85	85	205
Kirkmahoe	14	21	75
Kirkmichael	4	4	10
Lochmaben	28	28	34
Lockerbie	60	60	133
Moffat	26	26	47
Penpont	22	22	46
Ruthwell	10	10	17
Sanquhar	59	59	102
Stewartry	8	8	33
Thornhill	30	30	54
Tinwald, Torthorwald, etc.	21	21	26
Total	726	729	1538
Health Visitors—Burgh ..	264	263	467
Health Visitors—County ..	404	404	1018
Grand Total	1394	1396	3023

During the latter part of the school year the arrangements for "following up" in Dumfries Burgh Schools were taken over by the Burgh Health Visitors.

D. SUPERVISION OF INFECTIOUS DISEASE.

E. CO-ORDINATION WITH PUBLIC HEALTH SERVICE.

The arrangements under headings D. and E. are described in former reports.

VII.—Physical Condition of School Children.

A. TOTAL NUMBER EXAMINED.

(a) At Systematic Examinations.

Age.	Boys.	Girls.	Total.
Under 5 years	65	60	125
Age 5 „	525	490	1015
„ 6 „	80	86	166
„ 7 „	26	32	58
„ 8 „	28	25	53
„ 9 „	562	557	1119
„ 10 „	30	31	61
„ 11 „	19	23	42
„ 12 „	23	29	52
„ 13 „	666	606	1272
„ 14 „	11	17	28
„ 15 „	1	2	3
„ 16 and over	42	55	97
	<hr/> 2078	<hr/> 2013	<hr/> 4091

Grouping the total number as Entrants, Intermediates, and Leavers, the figures are :—

	Boys.	Girls.	Total.
Entrants	724	693	1417
Intermediates	611	611	1222
Leavers	743	709	1452
	<hr/> 2078	<hr/> 2013	<hr/> 4091

(b) Special Cases.

There were 5786 children examined as special cases as follows :—

Re-examination of Notified Defects	2259
Vision Testing at age 7	1179
Re-examination of Pediculosis Cases	1659
At the request of Parent or Teacher	243
At the request of the School Medical Officer*	96
For Infectious Disease	52
For Mental and Physical Defect	298
	<hr/> 5786 <hr/>

* Includes children boarded out by the County Council.

B. NUMBER OF CHILDREN NOTIFIED TO PARENTS AS SUFFERING FROM DEFECTS AND PEDICULOSIS.

Total number examined, 9877.

Number Notified	Defects—%	Pediculosis—%
(a) At Systematic examinations	270	245
(b) Special cases	291	503
	} 5.68	} 7.57

The number showing no defects at the Systematic examination was 314 (7.67 per cent.).

N.B.—A defective tooth, weight below average, etc., count as “defects.”

**C. THE NUMBER OF CHILDREN WITH NOTIFIED DEFECTS
RECEIVING ATTENTION.**

		No. Improved.	Per cent.
Number Re-examined :—			
(a) At Systematic Examinations	270	139	} 65.09
(b) As Special Cases	2259	1583	
Pediculosis Cases	1883	1303	69.19

D. AND E. CLOTHING AND FOOTGEAR.

Number Examined.	Underclad.		Overclad.		Clothing Dirty.		Unsatis- factory Footgear.	
	No.	%	No.	%	No.	%	No.	%
Boys 2078	...		...		3	0.13	1	0.04
Girls 2013	3	0.14	1	0.04	5	0.24	1	0.01
Total 4091	3	0.07	1	0.02	8	0.19	2	0.04
Specials ...	18		...		45		16	

F. AVERAGE HEIGHTS AND WEIGHTS.

Before weighing the children, boots, shoes, and heavy outer garments are removed.

The following tables show the average heights and weights of boys and girls of all ages from 4 to 16 years :

Boys.

Age.	Number Examined	Average Heights in Inches.		Average Weights in Lbs.	
		Dumfries-shire.	Anthropo-metric Standard.	Dumfries-shire.	Anthropo-metric Standard.
Under 5	65	41.23	...	40.65	...
5- 6	525	42.40	41.03	42.53	39.90
6- 7	80	44.32	44.00	46.60	44.40
7- 8	26	46.66	45.95	47.06	49.70
8- 9	28	48.93	47.05	56.86	54.90
9-10	562	50.87	49.70	61.45	60.40
10-11	30	52.53	51.84	67.88	67.50
11-12	19	54.22	53.50	74.73	72.00
12-13	23	57.51	54.99	82.89	76.70
13-14	666	58.54	56.91	87.52	82.60
14-15	11	59.47	...	92.29	...
15-16	1	63.75	...	109.25	...
over 16	42	66.25	...	127.34	...

GIRLS.

Age.	Number Examined	Average Heights in Inches.		Average Weights in Lbs.	
		Dumfries-shire.	Anthropo-metric Standard.	Dumfries-shire.	Anthropo-metric Standard.
Under 5	60	40.70	...	38.63	...
5- 6	490	42.10	40.55	41.27	39.20
6- 7	86	43.66	42.58	44.67	41.72
7- 8	32	47.34	44.45	52.77	47.50
8- 9	25	49.04	46.60	54.31	52.10
9-10	557	50.55	48.72	58.96	55.50
10-11	31	51.66	51.66	64.35	62.00
11-12	23	54.90	53.12	72.46	68.10
12-13	29	58.51	55.66	90.23	76.40
13-14	606	59.52	57.77	92.77	87.20
14-15	17	61.58	...	99.36	...
15-16	2	63.50	...	116.25	...
over 16	55	63.43	...	118.50	...

G. CLEANLINESS.

Pediculosis may be taken as a measure of this.

Number Examined.		Head.				Body.		Specials.
		Notified Cases.		Slight.				
		No.	%	No.	%	No.	%	No.
Boys	2078	37	1·78	19	0·91	2	0·09	316
Girls	2013	206	10·23	149	7·40	...	...	1343
Total	4091	243	5·94	168	4·1	2	0·04	1659

H. CONDITION OF THE SKIN.

(a) Head.

Number Examined.			Ringworm.		Impetigo.		Other Diseases.	
			No.	%	No.	%	No.	%
Boys ...	2078		...	...	14	0·67	15	0·72
Girls ...	2013		...	...	6	0·29	8	0·39
Total ...	4091		...	...	20	0·48	23	0·56
Specials ...			9		39		8	

(b) Body.

Number Examined.		Ringworm.		Impetigo.		Scabies.		Other Diseases.	
		No.	%	No.	%	No.	%	No.	%
Boys	2078	1	0·04	...	...	15	0·72	35	1·68
Girls	2013	1	0·04	2	0·09	7	0·34	34	1·68
Total	4091	2	0·04	2	0·04	22	0·53	69	1·68
Specials		4		3		62		41	

I. NUTRITION.

Number Examined.	Above Average.		Average.		Below Average.		Very Bad	
	No.	%	No.	%	No.	%	No.	%
Boys 2078	663	31.90	878	42.25	537	25.84	...	...
Girls 2013	668	33.18	879	43.66	465	23.09	1	0.04
Total 4091	1331	32.53	1757	42.94	1002	24.49	1	0.02
Specials ...	...		...		2		8	

J. TEETH.

Number Examined.	All Sound.		1 to 4 Decayed.		5 or more Decayed.		Oral Sepsis	
	No.	%	No.	%	No.	%	No.	%
Boys 2078	513	24.68	1204	57.94	361	17.37	6	0.28
Girls 2013	483	23.99	1164	57.82	366	18.18	4	0.19
Total 4091	996	24.34	2368	57.88	727	17.77	10	0.24
Specials ...	...		...		2		5	

K. NOSE, THROAT, AND GLANDS.

(a) NOSE.

Number Examined.				Catarrh.		Nasal Obstruction.		Other Diseases.	
				No.	%	No.	%	No.	%
Boys	...	...	2078	59	2.83	1	0.04	...	...
Girls	...	...	2013	45	2.23	5	0.24	...	...
Total	...	...	4091	104	2.54	6	0.14	...	...
Specials	...	...	...	17		25		2	

(b) THROAT.

Number Examined.	Tonsils.				Adenoids.				Other Diseases	
	Slightly Enlarged.		Markedly Enlarged.		Probably Present.		Present.			
	No.	%	No.	%	No.	%	No.	%	No.	%
Boys 2078	287	13.78	80	3.85	17	0.81	2	0.09	2	0.09
Girls 2013	306	15.20	107	5.31	32	1.58	1	0.04	1	0.04
Total 4091	593	14.49	187	4.57	49	1.19	3	0.07	3	0.07
Specials	7		586		132		25		5	

(c) LYMPHATIC GLANDS.

Number Examined.	Palpably Enlarged.		Markedly Enlarged.		Suppurating.		Cicatrices.	
	No.	%	No.	%	No.	%	No.	%
Boys 2078	504	24.25	7	0.33	...	...	19	0.91
Girls 2013	365	18.13	7	0.34	...	...	20	0.99
Total 4091	869	21.24	14	0.33	...	...	39	0.95
Specials ...	...		38		3		2	

L. EXTERNAL EYE DISEASES.

Number Examined.	Blepharitis.		Conjunctivitis.		Corneal Opacity.		Strabismus.		Other Diseases.	
	No.	%	No.	%	No.	%	No.	%		
Boys 2078	17	0.81	5	0.24	5	0.24	28	1.39	6	0.28
Girls 2013	21	1.04	5	0.24	4	0.19	24	1.19	3	0.14
Total 4091	38	0.92	10	0.24	9	0.22	52	1.27	9	0.22
Specials	25		10		10		343		20	

M. VISUAL ACUITY.

Tested in children of 7 years and over.

Number Examined.	Good, 6/6.		Fair, 6/9-6/12.		6/18 or Worse.		Bad in one Eye only.	
	No.	%	No.	%	No.	%	No.	%
Boys 1952	968	49.59	761	38.98	85	4.35	138	7.07
Girls 1954	902	46.16	842	43.09	94	4.81	116	5.93
Total 3906	1870	47.87	1603	41.04	179	4.58	254	6.50
Specials ...	6		42		617		169	

The number of retinoscopies performed was 197, of which 53 were by the Consulting Oculist and 144 by the School Medical Officers.

Arising out of this, 120 parents were notified that their children required glasses. Of these :—

54 declared themselves necessitous.

63 paid for glasses.

2 desired the prescription to be sent to them.

1 did not reply.

Of the remaining 77 retinoscopies, 34 were of children who, after examination, were found not to require glasses ; 7 were of children who did not require the glasses to be changed ; and 36 were duplicate examinations of those children referred to the Consulting Oculist.

N. EARS.

Number Examined.			Otorrhœa.		Wax.		Other Diseases.	
			No	%	No.	%	No.	%
Boys	...	2078	10	0.48	9	0.43	1	0.04
Girls	...	2013	7	0.34	4	0.19	1	0.04
Total	...	4091	17	0.41	13	0.31	2	0.04
Specials	...	...	73		7		...	

O. HEARING.

Number Examined.			Slightly Deaf.		Markedly Deaf.	
			No.	%	No.	%
Boys	...	2078	4	0.19	5	0.24
Girls	...	2013	7	0.34	2	0.09
Total	...	4091	11	0.26	7	0.17
Specials	...	...	7		13	

P. SPEECH.

Number Examined.			Defective Articulation.		Stammering.	
			No.	%	No.	%
Boys	...	2078	18	0.86	7	0.33
Girls	...	2013	5	0.24	2	0.09
Total	...	4091	23	0.56	9	0.22
Specials	...	...	2		...	

Q. MENTAL CONDITION.

Number Examined.	Dull or Backward		Mentally Defective.	
	No	%	No.	%
Boys 2078	39	1.87	14	0.67
Girls 2013	20	0.99	5	0.24
Total ... 4091	59	1.44	19	0.46
Specials	4		20	

There are 3 special classes in the county with a total roll, at May, 1937, of 70 pupils.

The School Medical Officers have paid 23 visits to special classes during the year.

The number of mental tests performed was 128, and 17 children were certified as unfit to benefit by the instruction in the ordinary school.

R. HEART AND CIRCULATION.

Number Examined.	Organic Disease.				Functional Diseases.		Anæmia.	
	Congenital.		Acquired.					
	No.	%	No.	%	No.	%	No.	%
Boys 2078	3	0.13	29	1.39	80	3.85	16	0.77
Girls 2013	2	0.09	15	0.74	99	4.91	15	0.74
Total 4091	5	0.12	44	1.07	179	4.37	31	0.75
Specials ...	10		156		160		57	

S. LUNGS.

Number. Examined.		Bronchitis and Catarrh.		Tuber- culosis.		Suspected Tuberculosis		Tuberculosis Contact and other Lung Diseases	
		No.	%	No.	%	No.	%	No.	%
Boys	2078	41	1.97	1	0.04	6	0.28	9	0.43
Girls	2013	44	2.18	1	0.04	3	0.14	5	0.24
Total	4091	85	2.07	2	0.04	9	0.22	14	0.33
Specials	...	25		23		60		68	

T. NERVOUS SYSTEM.

Number Examined.		Epilepsy.		Chorea.		Infantile Paralysis.		Other Diseases.	
		No.	%	No.	%	No.	%	No.	%
Boys	2078	2	0.09	1	0.04	3	0.13	1	0.04
Girls	2013	3	0.14	...		2	0.09	...	
Total	4091	5	0.12	1	0.02	5	0.12	1	0.02
Specials	...	12		2		11		6	

U. TUBERCULOSIS (NON-PULMONARY).

Number Examined.		Glandular.		Bones and Joints.		Abdominal.		Skin	
		No.	%	No.	%	No.	%	No.	%
Boys	2078	2	0.09	2	0.09	3	0.13	...	
Girls	2013	...		2	0.09	...		...
Total	4091	2	0.04	4	0.09	3	0.07	...	
Specials	...	19		16		14		...	

V. RICKETS.

Number Examined.	Slight.		Marked	
	No.	%	No.	%
Boys 2078	19	0·91	3	0·13
Girls 2013	10	0·49	...	
Total 4091	29	0·70	3	0·07
Specials ... ..	...		1	

W. DEFORMITIES.

Number Examined.	Congenital.		Acquired * (non-Rachitic)	
	No.	%	No.	%
Boys 2078	12	0·57	9	0·43
Girls 2013	5	0·24	47	2·33
Total 4091	17	0·41	56	1·36
Specials	9		4	

* Includes Defects of Posture.

X. INFECTIOUS AND CONTAGIOUS DISEASES.

Number Examined.		Whooping-cough.		Rubella.	
		No.	%	No.	%
Boys	2078	3	0·13	...	
Girls	2013	1	0·04	...	
Total	4091	4	0·09	...	
Specials		11		2	

Y. OTHER DISEASES OR DEFECTS.

Number Examined.				Number	Per cent.
Boys	...	...	2078	59	2.83
Girls	...	...	2013	36	1.78
Total	...	...	4091	95	2.32
Specials	...	...	...	74	...

Z. VACCINATION.

Number Examined.				No Marks.	Per cent.
Boys	...	...	2078	665	32.00
Girls	...	...	2013	649	32.24
Total	...	...	4091	1314	32.11

REPORT

ON

DENTAL TREATMENT.

Report by the School Dentist.

1st Quarter :—August, September, and October, 1936.

Inspection :—Children between 5 and 10 years.

Mennock.	Wanlockhead.	Hutton Hall.
Eskdalemuir.	Hutton.	Amisfield.
Glencaple.	Ewes.	Medgale.
Westerkirk.	Maxwelltown.	Lockerbie Acad.
Gubhill.	Beattock.	Wauchope.
Sanquhar.	Davington.	Cairn.
Wamphray.	Sibbaldbie.	

Treatment :—

Mennock.	Wanlockhead.	Hutton Hall.
Eskdalemuir.	Hutton.	Amisfield.
Glencaple.	Ewes.	Megdale.
Westerkirk.	Maxwelltown.	Lockerbie Acad.
Gubhill.	Beattock.	

2nd Quarter :—November and December, 1936, and
January, 1937.

Inspection :—Children between 5 and 10 years.

Tundergarth.	Half-Morton.	Canonbie.
St. Columba's.	Harlaw.	Gilnockie.
Corrie.	Glenzier.	Steilston.
Garrel.	Hoddam.	Holywood.
Annan Academy.	Kirk.-Fleming.	Johnstonebridge.
Collin.	Breconbeds.	Shieldhill.
Brydekirk.	Mount Pleasant.	Gretna Public.
Gretna Township.	Applegarth.	Cogrieburn.
Middlebie.	Gair.	Cummertrees.
Woodside.	Penpont.	Keir.
Nethermill.	Torthorwald.	Catherinefield.

Treatment :—

Wauchope.	Sanquhar.	Davington.
Cairn.	Wamphray.	Sibbaldbie.
Tundergarth.	Half-Morton.	Canonbie.
St. Columba's.	Harlaw.	Gilnockie.
Corrie.	Glenzier.	Steilston.
Garrel.	Hoddam.	Holywood.
Annan Academy.	Kirk.-Fleming.	Johnstonebridge.
Collin.	Breconbeds.	Shieldhill.
Brydekirk.	Mount Pleasant.	

3rd Quarter :—February, March, and April, 1937.*Inspection :—Children between 5 and 10 years.*

Hottsbridge.	Speldoch.	Dunscore.
Burnhead.	Kirkconnel.	Templand.
Goodhope.	Eaglesfield.	St. Mungo.
Crossford.	Dalton.	Glenesslin.
Moffat Academy.	Evan Water.	Loehmaben.
Hightae.	Tynron Public.	Tynron Endowed.
Barndennoch.	Craigmuie.	Enterkinfoot.
Durisdier.	Birleyhill.	Morton.
Gatelowbridge.	Duncow.	Dalswinton.
Moniaive.	Trailtrow.	Langholm Acad.

Treatment :—

Gretna Public.	Gretna Township.	Applegarth.
Cogrieburn.	Middlebie.	Gair.
Cummertrees.	Woodside.	Penpont.
Keir.	Nethermill.	Torthorwald.
Catherinefield.	Speldoch.	Dunscore.
Kirkconnel.	Templand.	Goodhope.
Eaglesfield.	St. Mungo.	Crossford.
Dalton.	Glenesslin.	Moffat Academy.
Evan Water.	Loehmaben.	Hightae.
Tynron Public.	Tynron Endowed.	Barndennoch.
Craigmuie.		

4th Quarter :—May, June, and July, 1937.

Inspection :—Children between 5 and 10 years.

Ruthwell.	Mouswald.	Carronbridge
Eastriggs.	Dornock.	Auldgirth.
Wallacehall Acad.	Brownhall.	Noblehill.

Treatment :—

Ruthwell.	Mouswald.	Carronbridge.
Eastriggs.	Dornock.	Auldgirth.
Wallacehall Acad.	Brownhall.	Noblehill.
Durisddeer.	Birleyhill.	Morton.
Gatelawbridge.	Duncow.	Dalswinton.
Moniaive.	Trailtrow.	Langholm Acad.

Summary of Work Done.

Number of schools visited for inspection	92
Number of schools visited for treatment	89
Number of children inspected	4815
Number of children requiring treatment	2185 (45·38%)
Number of children not requiring treatment	2630 (54·62%)

Of those requiring treatment, 1337 (63·215%) accepted and 778 (36·785%) refused treatment. 70 forms were not returned; and, of those accepting treatment, 63 were absent from school at the time of the Dentist's visit and did not receive treatment.

In addition to the 1337 routine cases, 151 special cases were treated, making a total of 1488 children treated.

The operative procedures undertaken were :—

Number of Fillings	480
Number of Extractions	2512
Number of Sealings	5

Percentage of Acceptances of Dental Treatment.

100%—Megdale, Gubhill, Birleyhill, Gatelawbridge, Craigmuir, Tundergarth, Harlaw, Garrel, Mount Pleasant.

100-90%—Johnstonebridge (92·86), Hoddam (91·30), Speddoch (90·90), Wamphray (90).

90-80%—Davington, Penpont (88·8), Crossford (87·5), Applegarth (86·6), Glenesslin (85·71), Goodhope, Woodside, Dornock (83·3), Wallacehall Academy (81·395), Glencaple, Dunscore, Sibbaldbie (80).

80-70%—Kirkconnel (79·01), St. Mungo (77·7), Mouswald (76·92), Evan Water, Wanlockhead, Half-Morton, Steilston (75), Moniaive (73·9), Sanquhar (73·83), Durisdeer (72·2), Cairn, Holywood (71·43), Breconbeds (70·59), Wauchope (70).

70-60% — Keir (69·23), Eastriggs (68·85), Morton (68·52), Lockerbie Academy (67·71), Corrie, Tynron Public, Noblehill (66·6), Canonbie (65), Moffat Academy (64·4), Beattock (64), Glenzier (63·63), Trailtrow, Brydekirk (62·5), Gretna Township (61·63), Gretna Public (61·5), Hutton Hall, Ewes, Nethermill, Shieldhill (60).

60-50% — Kirkpatrick-Fleming (58·62), Lochmaben (58·18), Middlebie, Hutton (57·14), Eaglesfield, Duncow (55·5), St. Columba's (54·54), Brownhall (54·16), Langholm Academy (54·1), Dalton, Catherinefield (52·63), Eskdalemuir, Amisfield, Ruthwell, Dalswinton, Carronbridge, Cogrieburn, Gair, Gummertrees, Annan Academy Special Class (50).

50-40%—Maxwelltown (48·40), Collin (46·6), Auldgirth (45·45), Annan Academy (42·11), Templand (41·18), Men-nock, Torthorwald (40).

40-30%—Hightae (38·8), Lockerbie Academy Special Class (37·5), Tynron Endowed (33·3).

30-20%—Barndennoch (25), Gilnockie (20).

20-10%—Westerkirk (12·5).

0%—Hotttsbridge, Burnhead, Enterkinfoot.

